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ORIGINAL ARTICLES.

THE PROPHYLAXIS AND CONTROL OF LEPROSY IN THIS COUNTRY.[1]

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IN this paper, which has been prepared at the request and, I may even add, the urgent solicitation of the President of this Association, I have not the pretention to suppose that I have solved the difficult problem of the control of leprosy in this country. My object has been simply to offer a few suggestions, based upon my observation and study of the disease, with the view of eliciting the opinions of the members upon this important subject.

Unfortunately, the leprosy question in this country has been chiefly agitated by alarmists through the columns of the daily press. It seems to me desirable from every point of view that the discussion and decision of this purely sanitary question should be transferred from the arena of sensational journalism to the higher tribunal of scientific medicine.

It is worthy of record that this Association was the first among the scientific bodies of this country to call attention to the prevalence of leprosy in the United States and it has been the most active and persistent in urging upon our legislative and sanitary authorities the importance of taking suitable measures to prevent its further development and spread. Our distinguished confrère, Dr. James C. White, was the pioneer in this movement. As early as 1878—a period when leprosy was scarcely recognized in the nosography of this country—he presented statistics showing that the disease prevailed to an extent hitherto unsuspected. In 1882 he again presented a paper upon this subject and urged the necessity of repressive measures to check the evil. It was, I believe, at his suggestion and through his influence that the subject of the "Distribution and Control of Leprosy in North America" was made the topic for discussion before the general session of this Congress at its meeting in 1894.

As a result of this and other efforts to secure legislative action an "Act for the Investigation of Leprosy" was passed by the Senate and House of Representatives April 22, 1898. Under its provisions the Supervising Surgeon-General of the Marine-Hospital Service was empowered to appoint a commission of medical officers of the Marine-Hospital Service to investigate the origin and prevalence of leprosy in the United States and to report upon what legislation is necessary for the prevention of the spread of the disease. I have been unable to secure any information as to the practical outcome of the work of this Commission.

I need not remind this Association that the course of events within the last few years has given a new and added significance to the question of the control of leprosy in this country. At the meeting in 1894, a careful and competent observer, Dr. Hyde, in his report upon the distribution of leprosy in North America estimated that there was within our borders a leper population of from 90 to 150. There can be no doubt that Dr. Hyde's estimate was far too conservative as it has since transpired that there were in Louisiana alone more lepers than were embraced in his statistics for the entire country.

In the evolution of this country from a continental to a world power, its leper population has been largely augmented through territorial acquisitions. By the annexation of the Hawaiian Islands the United States has incorporated a native population tainted with leprosy. In absorbing Porto Rico and establishing a protectorate over Cuba our people have been brought into most intimate commercial and social relations with the leprous inhabitants of these islands. In appropriating the Philippines we have become possessed of one of the most important centers of leprosy in the Orient, and which, from its proximity to the "cradle of leprosy" in Kwan Tung and the leprosy-infected countries of Japan, must be continually exposed to fresh increments of infected material through immigration of Chinese and Japanese coolies.

That our territorial expansion has created conditions favorable to the increase of leprosy in this country cannot be gainsayed. The danger will come from the exposure of soldiers and sailors who form the army of occupation, of civilians who fill administrative posts in the government of these colonies, and others who are attracted by considerations of trade and commerce and who are thus brought into intimate contact with their leprous population. Whatever doubt there may be of the contagious activity of leprosy when transplanted to this country there can be no question of its ultra-contagiousness in these tropical islands.

It is worthy of note that the leper population of Southern and Central Europe within the present century has been almost entirely recruited from the ranks of soldiers and sailors or official representatives of the administrative departments who have sojourned for a longer or shorter period in leprous-infected colonies. Of the 100 cases of leprosy observed in Great Britain within

[1] Read before the American Dermatological Association at its annual meeting, held at Washington, D. C., May 1, 1900.

the past ten years, all, with possibly two exceptions, contracted the disease in the leper colonies of England. M. Olivade states that of the 1500 cases of leprosy in Spain, 500 of which had come under his personal observation, the great majority were soldiers or monks who contracted the disease in the Philippines, the Canaries or Cuba. The same authority traces the origin of the two most severe epidemic outbreaks of leprosy in Southern Europe within the past three centuries —*viz.*, the epidemics in the Provinces of Alicante and Parcent to the importation of the disease from the Philippines.

With these facts before us it may be pertinent to inquire how many of our soldiers who form the army of occupation in Cuba, Porto Rico and the Philippines will bring back leprosy as a souvenir of their sojourn in these islands.

There is another possible danger of the increase of leprosy growing out of the changed foreign relations of this country which may be briefly considered. The "open door" into China which has been proclaimed as one of the most conspicuous triumphs of American diplomacy has also its sinister aspect. The teeming population of China has always furnished a favorable culture field for many infectious diseases. The "Flowery Kingdom" has been the breeding-place and nursery of pestilential diseases, cholera, plague, as well as leprosy, from time immemorial. The "open door" will not only afford access to the rich products and trade advantages of the Celestial Empire but will also furnish an outlet to the pestilential diseases which have been domiciled there for centuries, but which have been comparatively isolated by the traditional exclusiveness of the people. There can be no commerce or free intercourse between nations or races without an interchange of infectious diseases as well as commercial commodities.

Further, it may be said, that the locomotive forces which modern progress has placed at the command of civilization—the rapid transit by sea and land—furnishing swift and frequent communication and facilitating free intercourse and intermingling of the people of different countries, may also serve as a means for the transportation and dissemination of infectious diseases. So that in the future it is probable that most infectious diseases will lose their endemic character and become pandemic. Witness for example the plague which, imported from its breeding-place in China into India four years ago, has not only ravaged that country but has spread over a large portion of the globe and threatens to become world-wide in its extension.

The only question is whether these Oriental diseases will survive the contact of civilization, whether the better stamina of our people, the improved personal and public hygiene and our modern methods of sanitary supervision will be sufficient to cope with and exterminate them.

Before dismissing this part of the subject it may be said that the Chinese have been the most active disseminators of leprosy in modern times. These pig-tailed Argonauts of the Orient in their world-wide migrations in quest of the Golden Dollar have invaded many lands and almost every land they have touched they have tainted with leprosy. Cantlie in his prize essay on leprosy (New Sydenham Society, 1897) brings forward abundant historical evidence to prove that the spread of leprosy in the Malay Peninsula, the Dutch, Spanish and Portuguese East Indies and in Oceanica, as well as in the Islands of Fiji, New Caledonia and Hawaii and the Western coast of America, may be traced to Chinese coolie immigrants. In this vast area he states that the spread of leprosy has been in all cases coincident and concurrent with the immigration and residence of the coolies.

The Chinese have been not only the chief contaminators but the chief victims. In all these countries it may be said that with the exception of New Caledonia and Hawaii, where the racial peculiarities and social customs of the natives have favored the propagation of the disease, the Chinese have formed the bulk of the lepers, in New York as in San Francisco, it is the Chinaman who is the dominant leper.

While it is not the object of this paper to consider the control of leprosy in our new colonial possessions, I have deemed it important to point out what may be termed *the pathological side* of our policy of expansion, because, in my opinion, no wise or comprehensive plan of prophylaxis for this country can be framed which does not take into account the increased influx of infective material from these new sources of supply.

The leprosy of the United States, with the exception of Louisiana, is largely a foreign product, ingrafted by immigration, and it is impossible to destroy the growth *within* our borders if it is continually nourished by transplantation from *without*.

The most obvious indication, then, is to suppress the sources of supply, as far as possible, by the exclusion of all leprous immigrants. I say as far as possible, because quarantine against leprosy, although a most excellent measure, is and must be, from the very nature of the disease, incomplete in its operation. No system of quarantine has ever been devised that will effectually prevent the importation of a disease so prolonged in its incubation and so little manifest on ordinary inspection as leprosy. The advanced cases may be detected and turned back, but the incipient cases will slip through, despite the most rigid quarantine *cordon* that can be established.

Quarantine protection could doubtless be made more effective by international cooperation between this and other governments in which leprosy prevails, and by the examination of immigrants at the port of embarkation. All immigrants coming from leprous families and from leprous-infected districts, even if they show no signs of the disease, should be registered and kept under surveillance for several years after their arrival in order to watch for developments. The good effect of such a system is shown in the

operation of the international regulations which apply to the importation of Japanese coolies into Hawaii. A thorough examination is made before the laborers leave their own country and also upon their arrival in Hawaii. Among the 26,000 Japanese laborers who have been brought to Hawaii under the operations of these laws only six cases of leprosy have developed.

A careful examination should be made of all returning soldiers or civilians who have sojourned for a long time in our own or foreign leper colonies. While citizens of our own country cannot be denied the right of entrance and asylum, the identification and proper disposition of all such cases are essential to the control of the disease. Not only a seaboard but an equally rigid land quarantine should be established upon our Mexican and Canadian borders.

Another measure of increased efficiency would be the employment of skilled experts as quarantine inspectors. It does not appear that any special knowledge or training in the diagnosis of skin diseases has ever been considered a necessary qualification in the appointment of medical inspectors, although the large proportion of quarantinable diseases are distinguished by their skin lesions.

We come now to a consideration of the control of leprosy *within* the United States. What is the situation? Some of the practical aspects of the leprosy problem, relating to the extent of the evil, the attitude of the public and our health authorities, and the indications which point to its development and spread, may be briefly referred to.

There are numerous known foci of leprosy in various parts of the United States with an indeterminate number of cases scattered throughout the country. The actual number of cases of leprosy in any country is an unknown and unknowable quantity. From the very nature of the disease statistics cannot be computed by the methods ordinarily employed for the detection and registration of disease. Leprosy is a disease which readily lends itself to concealment and, unfortunately, the strongest motive for concealment is furnished by the hostile attitude of society toward the leper, due largely to an exaggerated conception of the acute, infectious nature of the disease. Science teaches that a leper is quite as innocuous from the point of view of contagion as the consumptive in the ordinary relations of life, yet the leper is shunned and avoided as the bearer of a deadly contagion, while the presence of the consumptive creates no concern. The presence of a leper in any assemblage or public conveyance would, if known, cause the wildest consternation and alarm. An incident occurring in St. Louis a few years ago may be mentioned as an illustration. "On the occasion of a leper being brought into Court upon *habeas corpus* proceedings there was a stampede from the court-room, even the judicial ermine sharing in the flight."

At the present day, in some parts of this country, the leper is as much of a pariah and an outcast as he was when stoned and driven forth from the walls of the city under the Levitical law. The badge of leprosy is to-day as shameful and degrading as it was in the medieval ages; although the leper is no longer compelled to wear upon his breast the red letter L. to distinguish him, he is none the less clothed in the scarlet cloak of infamy by public opinion. It is not surprising, then, that a disease which attaints not only the bearer, but also his family, rendering them outcasts from society, should be sedulously concealed.[1]

While there is no doubt that a public sentiment which leads to the avoidance of close contact or companionship with a leper, thus favoring his comparative isolation, is to a certain degree wholesome and protective, yet carried to such an exaggerated extent it is as senseless as it is to be deplored.

As regards the attitude of our health authorities it may be said that no organized or systematic effort has been made for the control of leprosy in the United States. Louisiana is the only State in the Union which has provided a special asylum or lazaretto for the reception and care of its leper population. Although the provisions of the act creating this institution make it obligatory that all persons in the State afflicted with the disease should be isolated therein, the policy of segregation has proven a comparative failure.

In a recent communication to me Dr. Dyer states: "The legislation as it stands is quite sufficient for all purposes, but it fails of efficacy for several reasons, *viz.:* (1) The Board is made up largely of laymen who have no conception of hospital necessities and who have fulfilled the law creating them only in so far as they have provided an asylum for such lepers as may choose or as may be persuaded to take refuge there. (2) The physicians of Louisiana are blind to the urgency of reporting cases of this disease or they, like myself, are unwilling to send any patient to the home to die without treatment of a disease which is amenable to medical care if not cure. It is my opinion that the question of leprosy control in Louisiana is as yet unsolved. During the existence of the leper-house there have been to my knowledge over 150 lepers at large while only about 30 have been in the home."

Although the health authorities of other States are empowered to isolate leprosy under the provisions of the general law applying to diseases dangerous to the public health, yet the exercise of this authority has been for the most part feeble and spasmodic. In some States repressive meas-

[1] In the presence of leprosy humanity ceases to be humane; even the mantle of Christian charity is not broad enough to cover this disease. In a little town in Ohio two children of a deceased Union soldier who had served in the Civil War were found to be affected with a rare form of disease, which experts who were consulted pronounced to be syringomyelia—the other six children in the family were unaffected. The dread word, *leprosy*, whispered abroad, was sufficient to transform the little circle of friends and neighbors into a hostile community. An impassable barrier was placed around this family by public sentiment. The children were denied school and church privileges and cut off from all communication with their fellows. The attending physician writes me, "they are as completely isolated as if shut up in a prison."

ures have been limited to the impounding in the nearest pest-house of any vagrant leper who might wander into a dispensary or be apprehended in the streets; in others a do-nothing policy has prevailed.

The Health Board of California has the power to confine in the pest-house of San Francisco all lepers found within the limits of the State; and the enforcement of the law, especially in the case of Chinese immigrants, has been more vigorous than in most other States.

Among the Eastern States Pennsylvania has perhaps waged the most relentless warfare against the leper; all known lepers coming under the jurisdiction of its Health Board have been imprisoned or deported and physicians fined for not reporting cases.[1]

The action of the municipal and State authorities of New York toward leprosy has been inconsistent and to a certain degree capricious. About ten years ago the Health Board of New York City began to take official cognizance of leprosy. All lepers coming within its jurisdiction were isolated on North Brothers Island, at first in a tent and later in a disused building for contagious diseases. Three years ago the lepers were allowed to escape and since then the disease has been practically ignored by the Health Board.

It must be confessed that the Health authorities of New York have been confused and hampered in pursuing a systematic policy by the conflicting and contradictory opinions of their medical advisers as to the contagious nature of the disease and its danger to the public health. It would be foreign to the scope of this paper to present arguments in favor of the contagiousness of leprosy —suffice it to say that the clinical evidence is overwhelming and conclusive. It will be admitted, however, that the virulence of leprous germs is modified by natural agencies, and that leprosy does not always and under all conditions comport itself as an actively contagious disease. So that a perfectly honest observer who limits his field of observation to certain favored regions will find little evidence of its contagious activity.

In New York City, for example, lepers coming from countries where the disease is endemic have lived for years. Many have been sent to the Charity Hospital where they have died, one having been employed as nurse, another as orderly in the institution and, so far as is known, no case of indigenous leprosy can be traced to association or contact with these patients. Again, of the 170 or more Norwegian lepers who have settled in New Scandinavia, there has been but one single case of contamination traced to contact with these imported lepers.

Too much stress has doubtless been placed on these negative facts of contagion. The same argument might be employed against the contagiousness of syphilis and tuberculosis. Thousands of consumptives and syphilitics have been treated in the Charity Hospital without communicating their disease. Besides the lepers in New York have been for the most part Chinese and West Indians who have been comparatively isolated by their color, race-prejudice, etc., and have not mingled freely with the general community. Neither is it surprising that the Norwegian immigrants have failed to propagate the disease, when we consider the conditions of their new environment. They settled in an open country, in new houses far removed from each other, with plenty of air and space about them and were thus comparatively isolated.

If we now turn our attention to Louisiana we shall find the most abundant evidences of contagion, as evinced by the notable and alarming increase of the disease and the large proportion of indigenous cases. The endemic outbreak in Louisiana is of extreme interest and importance, not only in illustrating the variable virulence of leprosy but also as affording an example of the remarkable decline and recrudescence of the disease under the same social and hygienic conditions. It also shows that the prolonged exemption of a community in which the seeds of leprosy have been implanted does not guarantee a continued or permanent immunity from the spread of the disease. The infection of a community with leprosy, like that of an individual, usually exhibits a prolonged incubatory phase. Twenty-five years ago not a half-dozen lepers could be found in the entire State and the disease was regarded as practically extinct—over 300 cases have been recorded since that time. What has happened in Louisiana may happen in New York or elsewhere.

My own impression is that leprosy is slowly gaining ground in this country. The fact that more cases have come under my observation within the past five years than in twenty years previous may, perhaps, count for nothing, but the fact that the records of the New York Dermatological Society embrace more cases within the past five years than in the twenty-six previous years of its existence is important as an indication of the increase of the disease. Another fact of significant import is that cases of indigenous leprosy are unquestionably multiplying. Two such cases were presented to the Society within the past few months.

From this survey of the subject we may conclude that there are many indications which point to the spread of leprosy in the United States, *vis.*: The new danger of infection to which this country is exposed from its political and commercial relations with its leprosy-infected colonies, the notable and alarming increase of the disease in Louisiana, and the evidences of its indigenous growth in that State and elsewhere. Our sanitary authorities should view this growing evil not with the apathy of indifference, nor yet with the overwrought apprehension that a dreadful revival

[1] I am informed by one of my colleagues that there may be found just outside the gates of the "City of Brotherly Love" a leper who has been confined in a disused dwelling, some distance removed from any other habitation, for seven years. During this period he has lived solitary and alone, his food being brought by an attendant who deposits it in a trough outside the door. And yet this glaring anachronism in sanitary control is perpetrated in the enlightened and progressive commonwealth of Pennsylvania.

of the medieval scourge threatens this country.

Assuming the urgent necessity of the control of leprosy in the United States we may now inquire whether this sanitary duty should be divided among local and State authorities or be centralized in the National Government.

It must be confessed that the policy pursued by our municipal and State boards of health in dealing with cases of leprosy coming within their jurisdiction is condemned by its results. It has consisted either in a resort to the harsh and cruel measure of imprisoning the leper in the nearest pest-house, or it has been a policy of inaction. There has been a lamentable failure in checking the evil and the experience of the past would seem to show that State control of leprosy is utterly impractical. Two causes may be assigned for this failure, one is the irregular distribution of the disease in the different States, the other is the expense and trouble involved in providing and maintaining separate buildings for the isolation and care of the lepers. It will be allowed that organized and concerted action is essential to any effective control of the disease, otherwise lepers living in a State where isolation was enforced would migrate to other localities where no such repressive measure was in force. The expense is considerable. Dr. Bracken states that he took occasion to inquire into the cost of maintaining two lepers in a township in Minnesota and found that it involved an expense of $1210 per annum with an addition of $1000 for a separate building. In some States there are but few known cases of the disease; in others none at all. It would be difficult to persuade the health authorities of a State in which there were perhaps but two or three lepers to assume the expense of providing a separate building for their isolation. The absence of any such provision leads the health authorities of many cities where leprosy is known to exist to conceal this fact from the general public.

For this and other reasons that might be referred to, the obvious conclusion is that the control of leprosy in this country should be committed to the National Government. The right of the Government to assume such control need not be discussed. The most ardent advocate of State rights would hardly oppose the good offices of the Government in relieving the State of the care of its lepers.

What are the most effective measures that can be employed for the suppression of leprosy? The consideration of this subject should be approached in a scientific spirit, divested of the medieval conception of the horror and virulence of the disease, and, at the same time, in a humane spirit—recognizing the leper as entitled, by reason of his affliction, to kind and charitable treatment. What are the methods by which this two-fold object—the protection of the public and the welfare of the leper—can be best fulfilled?

Isolation or segregation undoubtedly represents the most effective means known to sanitary science for the control of this and other contagious diseases. For the practical enforcement of this sanitary scheme the cooperation of the profession in reporting all cases of leprosy coming under their personal observation is, of course, essential. But to report a case of leprosy with the certain knowledge that the patient would be promptly immured in a pest-house, or confined like a criminal is abhorrent to every sentiment of humanity. Until proper provision is made for the care and medical treatment of lepers there can be no cordial cooperation on the part of the profession.

Another aspect of this question is worthy of consideration. Few physicians in this country are familiar with the clinical aspects of this disease and, therefore, are not competent to make a diagnosis. Now, the diagnosis of leprosy carries with it a grave responsibility which should not be lightly weighed. The isolation of all other contagious diseases contemplates brevity. To a smallpox patient, isolation means a few weeks' separation from his family and friends and a temporary interruption of his business, but for the leper it means an absolute and permanent severance of all his worldly interests and relations and life-long confinement. The consequences of a mistaken diagnosis are of such vital import that to prevent such a miscarriage a board of competent experts selected for their skill in the diagnosis of the disease should be appointed, and the verdict of leprosy should never be pronounced or, at least, accepted as final unless confirmed by such an examining board. Cases in which the symptoms are suspicious but not absolutely positive should be re-examined from time to time until they either clear up or become conclusive.

An intelligent discrimination should be exercised in the selection of cases suitable for segregation. I am not prepared to subscribe to the dictum "that every leper whenever and wherever found should be summarily seized under Government edict and confined until he dies," nor to the report of the Committee of the American Medical Association that "the enforcement of compulsory segregation should be absolute and implacable." A spirit of persecution, breathing out "threatenings and slaughter," has no place in the counsels of enlightened sanitary science. It is to be condemned on the ground of humanity as well as a matter of policy. The experience of all countries shows that it defeats the object in view by leading to the concealment of cases.

The highest wisdom of sanitary science is shown, not merely in the isolation of contagious diseases, but in a knowledge of the special conditions under which the contagion of each particular disease operates and the adaptation of the sanitary measures employed for its control to meet these conditions. The contagious mode of leprosy is not like that of an acute infectious disease—smallpox for example—but rather like that of tuberculosis or syphilis, depending upon the form and stage of the disease, the conditions of contact, etc.

If these conditions are absent or can be controlled in the case of the individual leper, there

is no risk of contamination. I do not, therefore, believe that every leper found in the United States should be subject to compulsory segregation, irrespective of the form and stage of the disease and of his social and material circumstances. There would seem to be no reason to fear that an anesthetic leper in whom the bacilli are few and deeply lodged in the nerves with no chance of their elimination through broken or ulcerated surfaces in the nose or elsewhere will communicate his disease. If his material circumstances are such that he can live by himself under proper surveillance, provided with a separate room, bed, board, etc., and does not come in intimate contact with others, he is practically innocuous. In cases where such conditions cannot be complied with, the leper should be placed in an asylum especially provided for this class of patients.

My own views of such institutions were expressed in a recent article on leprosy (Twentieth Century Practice of Medicine). "Home or asylums with suitable hygienic surroundings should be provided for the care and maintenance of lepers by the National Government. Such asylums should be made comfortable and attractive and arranged with special adaptation to the requirements and peculiar needs of its inmates. In view of the chronicity of the disease lepers should not be condemned to close confinement and inactivity but should be provided with interests, means of employment and recreation. As a large proportion of lepers are able to engage in some kind of industry such institutions might be made partly or wholly self-sustaining from the proceeds of their industries. They might be conducted as colonies and provision should be made for giving occupation to those able to work. Many lepers would doubtless avail themselves of such an institution without compulsion. There comes a times in the history of every leper when he would be glad of any asylum to end a miserable existence. Again there are many lepers who would voluntarily go to such a refuge as soon as the nature of the disease is evident for fear of spreading the contagion to their family or friends."

The inmates of such institutions should be provided with proper medical care. There is no doubt that if sanatoria or colonies were instituted for the reception of lepers, as in the case of consumptives, and provided with suitable means of treatment in the earlier stages, many of the cases might be aborted or the progress of the disease arrested.

Twenty-five years ago tuberculosis was classed as an incurable disease. Under the rational treatment employed at the present day the statistics of some of our sanatoria show 25 per cent. of cures and a still larger percentage of arrests of the disease. Such brilliant results are, of course, more marked in incipient cases. The doleful statistics of leper hospitals are based almost exclusively upon the treatment of advanced cases, as incipient cases rarely enter. There can be no doubt that the lamentable failure of our therapeutic measures against leprosy is due largely to the conditions under which they have been applied. The dominant conviction forced upon a leper when placed in a lazaretto is that he is shut up to die and the utter hopelessness thus engendered renders all treatment a failure.

A qualified expert with all the modern appliances for scientific investigation should be connected with each colony. The collection of lepers would afford an admirable opportunity for the study of the disease from a scientific standpoint. In countries where leprosy has most prevailed there have been few physicians fitted by scientific training or equipped with modern instruments of precision for the prosecution of bacteriological research. Among the unsolved problems of leprosy those relating to the life conditions of the bacillus and the modes of its propagation are most important in relation to the prevention of the disease.

Finally, it may be said that segregation, although a most valuable measure in the suppression of leprosy, has always proven in countries where it has been tried a defective measure, as its thorough enforcement has been found impossible. No official drag-net can be constructed which will gather in all the lepers in any country or community. The chief causes of failure must be sought for, as already pointed out, in the attitude of society toward the leper and the punitive character of the methods employed. Lepers in good social circumstances have assured me that they felt the dishonor of the disease to be its most fearful feature. It is not surprising, therefore, that all incriminating evidences of a disease which public opinion brands with the stigma of odium and disgrace and which condemns the bearer to the same punishment that is meted out crime, should be concealed as long as possible.

One condition which would promote the success of segregation is the removal of the popular prejudice and insensate fear of the disease which, deeply-rooted in the ignorance and traditions of the past, still survive at the present day. The medical profession in their capacity of teachers as well as guardians of the public health should enlighten the public upon these points. Not only the public mind but the public conscience should be educated, so that the spirit of proscription and persecution which society has in all ages exhibited toward the victims of this disease should be supplanted by a spirit of tolerance, if not of sympathy for their unfortunate lot.

It will be admitted that there is need of a reform in the methods of dealing with the leprosy in this country both in the interest of the public health and the welfare of those afflicted. The policy of inaction, no less than the policy of penal infliction should give place to a wise, comprehensive and energetic system of segregation which should be carried out with humanity and an intelligent discrimination. Instead of the traditional lazaretto, with its veiled inscription "All hope abandon, ye who enter here," asylums

should be provided which should be suggestive in their surroundings and mode of management of a sanatorium rather than a prison. These institutions should hold out assurances of humane care, of medical treatment, and, if possible, a hope of cure.

CAUSATION AND RELATIVE FREQUENCY OF TYPHLITIS, PERITYPHLITIS AND APPENDICITIS IN INFANCY AND CHILDHOOD.[1]

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PATIENT research and our advanced pathological knowledge have cleared up many an obscurity and forced us to disregard many a theory that only a few years since appeared tenable. Grisolle about 1839 did his best to controvert the teachings of Albers, which he correctly perceived were erroneous, but owing to the support of Dupeytren, Ferrall, Laennac and others equally as prominent, his views were completely lost sight of for nearly fifty years. He claimed that inflammations of the cecum were not accompanied by productions of pus and perforations of the appendix and pointed out that dysentery and ulceration of this part had no tendency to involve the adjacent connective tissue, but that disease of vermiform appendix with its phlegmonous inflammation, pus formation and perforations, explained satisfactorily the chain of events as we now know them to take place. The weight of evidence is so great that it must now be apparent to all that inflammation of the cecum takes little or no part in the production of appendicitis, that few cases of typhlitis exist as a primary disease, and that perityphilitis only occurs as a secondary complication. The cecal theory is now a thing of the past, as all clinical and pathological evidence is opposed to it. Renvers in 586 autopsies after perityphlitis found the appendix ruptured in 497 cases. Agar in 218 similar cases found the cecum ruptured only 29 times, but does not state whether this took place from without inwards or in the opposite direction. It is well known that inflammation of the large and small bowel has little or no tendency to involve the peritoneum and that the opposite is the rule with the inflamed appendix. With this in mind it is easy to understand how the inflammatory process can extend to the serous coat of the neighboring parts and the adjacent connective tissue. As careful an observer as Talemon states that early operation seldom or never shows that the cecum is involved (by inflammation or perforation), but admits that it may become the seat of trouble which, however, is secondary to disease of the appendix, not including those cases of tuberculosis, dysentery and typhoid. Stercoral accumulation in the cecum may occasionally produce a mild inflammation but never give rise to ulceration and easily disappear upon the administration of purgatives.

The inner coat of the gastro-intestinal tract is frequently the seat of varying degrees of inflammation in infancy and childhood, and more especially during the warmer months. Therefore, if these ordinary inflammatory processes took a prominent part in the production of appendicitis, this disease would be more frequently met with during the summer season, but such is not the case. Statistics prove beyond a question that this trouble is rather infrequent before the fourth year, increasing between that and the tenth, and that the majority occur between the latter and the thirtieth year. I have yet to see in my fifteen years' experience a case of primary typhlitis or perityphlitis, and as the literature of recent years shows the experience of others to be somewhat similar, my paper, therefore, resolves itself into one on appendicitis.

The appendix varies more in *size*, position and general make up than all the other structures of the human anatomy. In the early periods of life it is very rich in lymphoid tissue and has been styled the tonsil of the intestines. The size bears no relation to the frequency of the disease. The organ being a functionless, atrophied and rudimentary one, with a blood-supply that can easily be interfered with and which under healthful conditions seems barely sufficient, it must, therefore, be more or less susceptible on account of its low degree of vitality to inflammatory disturbances. The physiologist assigns to it no special function or even an indirect part in our vital economy.

The credit for our present knowledge belongs to us owing to the excellent work of Weir and McBurney of New York, Fitz of Boston, and Hodenpyl of this city, who, by the way, was the first to suggest that the bacillus coli communis played an important part in the production of the disease.

Etiology.—The presence of foreign bodies is now looked upon as a minor factor in producing appendicitis, but when they do exist they, like concretions, act in a mechanical way. When the mesentery is long the appendix is likely to assume a position that is almost straight, but when it is incomplete it may become curved or twisted, thus interfering with the circulation and also with the free drainage of the normal secretion preventing the egress of any fecal matter that might enter favoring the formation of concretions. The appendix is not at all exclusive in the choice of position and in about 60 per cent. of the cases the site selected favors gravity and facilitates free drainage, but when the position is a pendent one the ingress of matter is aided while the egress is hampered, thus inviting the formation of concretions. The cavity of the appendix and the opening into the cecum often predispose to inflammation; previous attacks of disease, or retrograde metamorphosis, having resulted in a narrowing of the latter or the production of one or more strictures of the lumen. Strictures are very frequent between the first and fifteenth

[1] Author's abstract of paper read before the Section on Pediatrics of the American Medical Association, Atlantic City, June 5-8, 1900.

year and the question as to whether these lesions are pathological or the natural consequence of retrograde changes is not yet satisfactorily decided. They have been found a number of times in the fetus and also in the new-born.

Relatively the appendix is larger in fetal life, infancy and childhood than it is in the adult, and compares to the large bowel as 1:10 while in the latter it is 1:20. It is also somewhat longer and wider in the male than in the female and this holds good in early life. It reaches its maximum size between the tenth and twentieth year and from here on it remains at a standstill or diminishes. This diminishing ratio is nothing more than a physiological or pathological retrogression, and with it goes a decreasing vascularity, and as the tissues receive their nourishment through the blood, I am therefore firmly convinced that the slight immunity that exists in early life can be credited to the fact that these changes in the majority of cases are not sufficient to interfere with the integrity of the part until after the fifteenth year and statistics support this assumption as only 15 per cent. of all cases of appendicitis occur prior to the fifteenth year. The female, both young and old, is less frequently the victim of appendicitis than the male. The comparatively smaller size of the organ with its increased vascularity (an anastomotic branch being given off from the region of the right ovary) accounts for this slight immunity.

One attack of appendicitis predisposes to subsequent inflammations, and this may be brought about either by a constriction, adhesive bands, the presence of a concretion or interference with the circulation. Constipation or diarrhea, if at all, are only minor etiological factors. If, as Maicaigne states, the bacillus coli communis of diarrheal discharges is much more virulent than it is in the healthy bowel, diarrhea may then become a more active agent. Any inflammatory state in this region may at times result in an appendicitis, especially if one or more of the predisposing conditions exist, owing to the fact that the appendix is less capable of resistance on account of its diminished vitality.

In early life the mucous membrane of the appendix possesses wonderful power of absorption and this in itself may become an active predisposing cause.

Exposure is a possible element in the causation of the disease. Several instances have been recorded, but none during infancy or childhood so far as I have observed.

Typhoid and tubercular ulcers of the appendix are met with post-mortem, but are seldom seen after operation. When the solitary glands of this organ are involved during an attack of the former disease the process of healing may result in the formation of a constriction and thus this disease may become a factor in bringing about this affection. Micro-organisms are now looked upon as being active exciting agents, and the bacillus coli communis is the germ most frequently found. Hodenpyl notes its presence in 34 out of 35 cases, Hawkins in 57 out of 61, and others give like experience. They may act independently, but their invasion is usually secondary to some existing condition. Welsh states that the bacillus coli communis is innocent if the integrity of the mucous membrane is maintained, but becomes pathogenic when the same is inflamed or injured. Hodenpyl, however, found numerous bacilli in the walls of the appendix without any lesion of the membrane.

Traumatism as a cause of appendicitis may be of two kinds. Direct and indirect. Instances of the former are matters of record and while it is possible for indirect violence to become an etiological factor, I feel positive that the appendix is already in a receptive state, and, therefore, while the injury may seem to be the active agent, it is only a minor factor in the causation of the trouble. Foreign bodies and concretions, when they exist, no doubt play an important rôle. The former may become a nucleus for the latter which are always formed in the appendix, but they both occur less frequently than was formerly supposed. When they do exist they act as irritants to the mucous membrane, producing a catarrhal inflammation and facilitating the invasion of micro-organisms and, secondly, by mechanical interference, occluding the lumen, acting as a ball-valve at the opening itself, or the seat of the stricture obstructing the circulation even so far as producing gangrene, and, finally, by pressure.

Expression of a Concretion by Digital Manipulation.—On April 15, 1900, I was called to see a boy who had been suffering from constipation for five or six days. Two days prior to my visit, on forcing a movement, he was taken with pain about the umbilicus which continued at irregular intervals. On the morning of the 15th he was seized with severe vomiting, the pain increasing so as to produce syncope. When I saw him he was on his side with the thighs flexed and stated that this was the most comfortable position. His temperature was 101° F., pulse 114, and he complained of continuous pain with frequent severe spasmodic seizures, which caused him to cry out. The abdominal wall was exceedingly thin; muscular resistance was not marked. I was, therefore, able to make out the appendix with comparative ease and found it in a state of erection and in a somewhat unusual location, directed upward and outward toward the crest of the ilium. The appendix I judged to be about three inches long and about one inch from its distal end I discovered a small but hardened fecal mass which I pressed toward the gut. On the following day his condition was about the same, but I was unable to make out the appendix owing to muscular resistance. I suggested operation but the father preferred waiting until the following morning, when to my surprise the boy had greatly improved, the temperature being normal, and the pulse 84. No pain, tenderness greatly diminished; the appendix could be felt but the concretion was no longer in evidence. He complained of extreme hunger and stated that he was en-

tirely well. Case passed out of my hands on the nineteenth as the parents considered a recurrence the main indication for an operation.

The expression of hardened fecal masses by digital manipulation to my knowledge has never before been referred to, and although the cases in which this mode of procedure would be applicable must necessarily be few, I could not refrain from directing attention to the manner in which this very satisfactory result was accomplished.

PERIODS IN GYNECOLOGY.[1]

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FIRST of all I wish to express my deep-felt appreciation of the honor you have conferred upon me by offering me the opportunity of reading a paper before you. The temptation to accept your kind invitation was so great that I could not resist it, although I know how great a risk I run in assuming the appearance of having anything to offer that you do not know and perhaps practise better than I. But when the hair turns gray and the body begins to shrink, one has reminiscences that may, at least for a moment, entertain the younger men who listen to him.

More than a quarter of a century has elapsed since I began to pay special attention to gynecology. I was then in my native country, Denmark, and gynecology was just beginning to find its way as a specialty to our shores. America was very far off at that time; still, before making it my home, I was quite familiar with the work of Marion Sims, Thomas Addis Emmet, Washington L. Atlee, and Theodore Gaillard Thomas. At that time London was the chief center to which flocked the greatest European surgeons, a Nélaton, a Billroth and a host of rising men, to learn ovariotomy from the man who had had the courage to take up again this American operation when, on account of the large mortality following in its wake, it had fallen into discredit in England. It was, then, a wonderful advancement when Thomas Spencer Wells reduced the mortality to 25 per cent. I had the advantage in 1872 to see nine ovariotomies performed by the master of the day. Although the antiseptic treatment of wounds by Joseph Lister had already been introduced at least seven years previously at Glasgow, it had hardly been adopted anywhere except in Copenhagen.

In those days the chief point of interest was how the pedicle should be treated. Baker Brown had severed it by compression and cauterization; I saw Alfred Meadows tie it with whip-cord and drop it; Spencer Wells still clung to compression by means of a clamp and the extraperitoneal fixation in the abdominal wound. Soon the energies of the whole medical world were turned to this grand operation. Its period of evolution has ended long ago. Perfection has been reached in the technic and mortality in experienced hands has been reduced from 25 to 2½ per cent. Unfortunately *pari passu* with this development has gone a greatly diminished need for the operation; since ovaries, with or without cause, were so frequently removed while small, they did not have time to form large tumors, so that ovariotomy nowadays has become one of the rarer gynecological operations.

When one examines the titles of articles on gynecological subjects in their chronological order, one is reminded of the geological layers superimposed one upon another in the crust of the earth. In those years nearly the whole interest was concentrated on ovariotomy, while nowadays we hardly ever meet with an article on this subject, on which, at least for the time being, the last word seems to have been said.

Then there came a period when the treatment of the cervix for stenosis or flexion and the concomitant dysmenorrhea and sterility was the absorbing topic. We had long discussions about incision and discission, and later, for a time, both were discarded for dilatation under the leadership of your late townsman, William Goodell. Incision, thanks to asepsis, having become safe, many, and I among them, have again returned to the more effective cutting operation.

The period of trachelotomy was followed by Emmet's operation for laceration of the cervix. In the transitional period before trachelorrhaphy was generally adopted, the scoffers had a good time, saying that one-half of the gynecologists were busy incising the cervix and the other half in sewing it up.

A little later curettage, one of the oldest gynecological operations, came into vogue. It has held its sway ever since and is at present, in my opinion, in that period of abuse through which it seems inevitable that every useful operation must pass. The general practitioner, who, in most cases, is not capable of making even a gynecological diagnosis, is very apt to put in a pessary or scrape out the womb, often with the result of starting a serious pelvic inflammation which may end in death.

With the year 1872 there came a new era in gynecology. Within the short period of a year the novel operation of removal of the uterine appendages was done by three men with different aims. Hegar in Germany did it in order to produce premature menopause in cases of bleeding uterine myomata. Robert Battey of Rome, Ga., performed almost simultaneously his so-called "normal ovariotomy" for serious nervous affections, the starting-point of which he took to be in the ovaries. Before either of these surgeons, Lawson Tait of Birmingham had extirpated the ovaries and tubes for diseased conditions in these organs themselves. Thus, attention was called to the tubes as an important seat of disease, and "Tait's operation" became the chief gynecological procedure during the next score of years. This was also grossly abused, entirely normal

[1] Read by invitation before the Section on Gynecology of the College of Physicians of Philadelphia.

ovaries being passed round in medical societies as trophies, until a more conservative spirit taught us that even diseased tubes and ovaries need not necessarily be removed, but might often be cured by medical means, electricity or conservative operations.

During the same period considerable attention was paid to the repair of the torn perineum. Often it was only a desire to do something new that gave rise to slight modifications of old methods; but within the last few years real progress has been made, and one of these new modes of treatment is due to a member of this Section, Dr. Barton Cook Hirst.

Besides perineorrhaphy, displacements of the uterus are receiving considerable attention in our time. Alexander's operation not only holds its own but is spreading. In uncomplicated cases of retroversion or retroflexion it is my favorite operation. It seems to me that with so simple a means of relief at our command, we are not justified in performing laparotomy for conditions, which, although they may give rise to considerable suffering, never threaten the patient's life. For a time many were opposed to this operation because they failed to find the ligaments at the external inguinal ring. It has been stated by good observers that the ligament may not exist, but this is certainly so rare a condition that it may be left out of consideration. With the exception of my first operation of this kind, which was performed on an old woman on whom it ought not to have been attempted, I have found the ligament in every case. A more serious objection is that some operators have stated that the uterus, after the operation, returned to its faulty position. Here, again, I am inclined to think the fault was in the operator and not in the operation. I have reason to believe that some operators overlook the rule of Alexander, that the operation should be combined with the temporary use of pessaries. He lays so much stress on this point that he declares that if no pessary is used it is no longer his operation. If there is a retroflexion he insists on having an intra-uterine stem inserted and kept in for two weeks, and under all circumstances, the patient should wear a Hodge pessary for at least six months. Since the operation is often performed on virgins or combined with colpoperineorrhaphy, I have had special long, narrow vaginal pessaries made for the purpose of taking the strain away from the place in which the round ligaments have been fastened, without undue stretching of the entrance to the vagina. I have seen several of my patients upon whom I had performed Alexander's operation after they, in the meantime, had borne a child. There had been no trouble during pregnancy and delivery, and the uterus was found in an entirely normal position.

I do not deny that similar results may be obtained either by fastening the round ligaments to the vagina or by shortening them through this organ, but these operations are comparatively difficult and not altogether free from danger, while Alexander's operation for one familiar with the anatomy and technic, is simplicity itself. If well performed the abdomen does not even show a scar after the operation. By taking care not to extend the incision beyond the portion covered with hair, the lineal cicatrices will be entirely concealed when the new growth appears.

The chief subject of discussion in our time is, however, hysterectomy, and I think it is fast approaching the same settled condition of perfection that ovariotomy obtained long ago. In this respect the year 1890 marks the beginning of as distinct a period as did the year 1872 in regard to salpingo-oöphorectomy. In 1890 Péan laid before the International Medical Congress, assembled at Berlin, a report of fifty cases of pelvic pus collections, treated with vaginal hysterectomy by means of clamps. At that time the operation was only recommended for large, bilateral abscesses, but soon the method of entering the abdominal cavity from below was applied to nearly every morbid condition in the pelvic organs. Before Péan—leaving out of consideration a few isolated operations by surgeons of another age—this route was used by Robert Battey in normal ovariotomy and by Carl Schroeder in the extirpation of the cancerous uterus. But since Péan's paper vaginal section became so popular that to a great extent it replaced laparotomy. One of the reviewers of the second edition of my text-book on diseases of women, I believe a gynecologist of this city, reproached me for having placed vaginal section on an equal footing with the abdominal method. If he is here to-night, I wish to explain that, as an author of a text-book, it is my duty to reflect what is being done and what, by many, is believed to be the best treatment. I may at most expose the advantages and drawbacks of different methods, and I have done so frankly and distinctly. Viewed from the standpoint of the practical gynecologist, the situation is very different. In the choice of an operation I give due consideration to the following points, first, which method is preferable in itself; secondly, which is most appropriate in the given case; and finally, which I can do best. As I stated above, that for retroflexion and retroversion I preferred the extraperitoneal shortening of the round ligaments to all other methods of treatment, I may now say that, with few exceptions, I prefer the abdominal to the vaginal section. The exceptions are a uterus with beginning carcinoma or sarcoma, not involving the parametria or the broad ligaments; a myomatous uterus, not exceeding the size of the first; and pelvic abscesses in the broader sense of the word—that is to say, any purulent collection which I can reach by colpotomy and perforation. In nearly all other cases I enter the abdominal cavity from above.

Much stress has been laid by the advocates of the vaginal route on the unsightliness of the scar left by laparotomy, to which I answer that the cicatrix is found in a part of the body that is hardly ever exposed to view, and secondly, that

if the abdomen is closed with care, and suppuration avoided by following the rules of antiseptic and aseptic surgery, the scar may be reduced to a narrow, straight, white line. A more serious impeachment of the abdominal section is that, on account of the length of the incision, it is more liable to give rise to the formation of hernia, than the vaginal section. But here again the surgeon can do much to prevent this untoward result by taking care to close the wound well.

There is less shock in the vaginal operation, since the intestines are hardly handled at all. The patient need not stay so long in bed. Pus may be evacuated without contaminating the abdominal cavity. A cancerous uterus may be removed without sewing germs on unaffected parts. On the other hand, the vaginal operation, on account of the small dimensions of the field, is more difficult to perform. We have to work at the bottom of a long, narrow tube. Without specula and retractors we cannot see anything, and when we use them they are often in the way of our fingers. Adhesions are more difficult to separate or cannot be reached at all. Hemorrhage is more difficult to check. The bladder and the intestines are more exposed to injury, and if such an accident occurs it is more difficult, or, perhaps, impossible to repair the lesion. The pelvis cannot be explored so easily and the abdomen still less.

The abdominal section offers the immense advantage that we can enlarge our incision *ad libitum*. Every part of the abdominal and pelvic cavities can be made accessible to view and touch, a feature of the greatest importance in these deep-seated affections in which the diagnosis of the most skillful often is uncertain or erroneous. When we have to deal with large, solid tumors there is no choice; but with small tumors, with some cases of ectopic gestation, and with inflammatory conditions, both routes are available, and the operator should choose the one which is most appropriate or which he can best perform.

Choosing the operation which has attracted the greatest attention in our period, I shall now describe an abdominal hysterectomy in every detail as I perform it, at the same time opening perspectives which will offer every one present, who feels so inclined, an opportunity to criticise me and speak in favor of other methods than those followed by me.

The patient is prepared for the operation by giving her a full bath and scrubbing her all over with soap, in order to have her skin in as good a condition as possible. The bowels are moved by means of compound licorice powder or sodium sulphate and furthermore emptied by administering a soap-suds enema, not later than six hours before the appointed time for the operation, as otherwise an evacuation is apt to take place during its performance. The abdomen is covered for twelve hours with a towel smeared with potassa soap, followed for a similar length of time by another towel wrung out of a solution of bichloride of mercury, 1-2000. At the time of the operation these antiseptic measures are supplemented by scrubbing the vagina with tincture of green soap and irrigating it with bichloride solution and lysol, which latter restores the smoothness lost by the use of the corrosive sublimate. Next, the abdomen is disinfected in a similar way, finishing off with alcohol.

I disinfect my hands with soap, hot water, bichloride of mercury, lysol, and alcohol. I do not use any gloves. Cotton gloves seem to me to be nugatory when we take the comparative size of their meshes and that of a microbe into consideration, and rubber gloves diminish my sense of touch and delicacy of manipulation so much that I think that on my hands they would do more harm than good. Besides that, we have sometimes pelvic operations in which we have to work in the dark with a perforator. In sliding the instrument along the index-finger, I have found that it is caught by the rubber and either folds it so as to be held back or tears it.

Before attacking the abdomen, the uterus is curetted and washed out, preferably with creolin on account of its hemostatic and antiseptic properties. In making the incision, two different scalpels are used, the first serving only to sever the skin. The *raison d'être* of this latest improvement is that the deepest portions of the cutaneous glands serve as habitat for pathogenic microbes which cannot be dislodged or killed by any applications to the epidermis. The knife that cuts through the deeper layer of the skin can, therefore, no longer be looked upon as aseptic, and it is a simple, but rational, precaution before proceeding any farther to exchange it for another.

The incision in the median line is best made from below upward on account of the direction of the fibers of the pyramidalis muscle. If there is a large tumor, we should bear in mind that the abdominal wall is thinned and under considerable tension. I have seen a gynecologist of large experience, overlooking this anatomical disposition, carry the first incision from the symphysis to the umbilicus through the whole abdominal wall and the omentum into a fibroid uterus, causing considerable hemorrhage and trouble in tying numerous vessels. It is not necessary to use any director, but the different layers of the abdominal wall should be severed one by one—the skin, the subcutaneous adipose tissue, the fascia, and the aponeurosis of the flat abdominal muscles. So far there is no danger, whereas the preperitoneal fat should be torn deliberately, and, finally, a small opening made in the peritoneum, lifting it well up and holding the scalpel almost horizontally, so as to expose the underlying omentum or intestine to the smallest possible danger. In one of my cases I found the unique condition of a fetal bladder extending all the way up to the umbilicus, between the aponeurosis and peritoneum. A bold incision would have led to an unnnecessary lesion of this viscus, whereas by progressing slowly I saw the unexpected condition, dissected the bladder loose from its surroundings and dropped it into the pelvis before opening the peritoneal cavity.

The incision should be long enough to allow a perfect inspection and handling of all organs down to the bottom of the pelvis; but, on the other hand, it should not be longer than needed, because every inch increases the danger of the formation of a ventral hernia. It is preferable not to make it longer than three or four inches to begin with and after the peritoneal cavity has been opened to extend the incision upward as far as needed and downward as far as the bladder will allow.

When the uterus is exposed, it should be lifted up, for which purpose I have found the traction-forceps invented by Dr. B. F. Baer, of this city, most excellent. I begin by tying the ovarian vessels—veins and arteries—in the infundibulopelvic ligament on one side. If there are any complications the easiest side should be chosen. These vessels run at quite a little distance below the free border of the ligament. There is, therefore, plenty of room for passing the ligature twice through the ligament, which is better than to simply tie it over the free border, as in the latter case it may slip off. As a further precaution, it is well to seize the artery separately on the cut surface and tie it with medium sized catgut. Before severing the tissue, a clamp is placed between the ligature and the appendages.

Next, the round ligament is treated in the same way, and the first incision in the broad ligament extended so as to sever it. After that, a transverse incision is carried from the point where the round ligament has been cut, about a finger-breadth above the bottom of the uterovesical pouch to the corresponding point on the other side. This incision is quite superficial, so as to implicate only the peritoneum and the superficial muscular layer of the uterus. With closed scissors, finger-nails and an occasional nick with scissors or knife, the bladder is separated from the cervix. The uterine artery on the first side is now surrounded by a medium-sized catgut ligature, a clamp put between it and the uterus, and the original incision in the broad ligament extended down into the parametrium. Often this artery may be felt before applying the ligature to it; if not, the ligature is placed where the artery normally runs, near the edge of the uterus. As a rule, we shall secure it in this way; but if we cut it, no harm is done. It is simply seized and tied separately. Dr. Nicholas Senn does not even pay any attention to either uterine artery before it spurts. The first uterine artery having been secured, a transverse incision is made through the cervix where it joins the body of the uterus. It is stated by some operators that after turning the uterus well over to the other side, they see the second uterine artery running plainly at the bottom of the wound. I must confess that I have not been so fortunate. I tie it just as the first, guided by touch or, if even that fails me, by anatomical knowledge. The second uterine artery having been secured in one way or another, the second round ligament is tied and cut and, finally, the second infundibulopelvic ligament, and the uterus is taken out in one piece with both its sets of appendages.

Now we return to the stump of the uterus. If we want to perform supravaginal amputation, which is preferable when the cervix is healthy, we only hollow the surface out by cutting out a small piece from the top surface, disinfect the cervical canal with a few drops of carbolic acid, and bring the edges of the muscular tissue together with a few interrupted catgut sutures. Last of all, the two edges of the peritoneum are united by means of a running suture from one infundibulopelvic ligament to the other.

If a total extirpation is preferred, the stump is seized with a traction-forceps, pulled up, and loosened from its surroundings, chiefly with closed scissors. The vagina is opened immediately below the cervical portion and severed all around. Some additional ligatures are needed on arteries coming from the vagina and the neighboring tissues. When the stump of the cervix has been removed, the edges of the vagina are stitched together, and then the peritoneum is closed over it, or, if preferred, the peritoneum is stitched to the vaginal edge and the hole packed with iodoform gauze. I use exclusively catgut that has been sterilized with formalin or boiled in alcohol under high pressure. By avoiding silk, we are guarded against the formation of fistulous tracts leading to a suture and slow to heal.

Dr. Senn advocates a modified extraperitoneal treatment of the pedicle, and Dr. Joseph Eastman is enthusiastic about a complete enucleation of the muscular tissue of the uterus, only leaving the peritoneal shell, both of which methods seem to me to be inferior to the one I have just described. Senn's operation takes much more time and requires two sittings. Eastman's is very tedious and nothing is gained by it, and as for peeling off the peritoneum, in my opinion it is impossible. The peritoneum of the normal and common myomatous uterus adheres closely to the underlying muscular tissue of the body of the uterus, so much so that Eastman has felt driven to construct a special pair of scissors, with little bulbs at the ends, in order to dissect it off. I believe that what he dissects off is not the peritoneum alone, but combined with a layer of muscular tissue. I have satisfied myself by microscopical examination that the muscle-cells of the uterus extend all the way out to the exceedingly thin endothelial layer forming the cover of that organ. Toward the end of pregnancy the connection between the peritoneum and the muscular tissue becomes considerably looser. In performing Cæsarean section, we see it lie like a mantle over the emptied uterus, easy to move and fold. But even in the pregnant condition the connection between the peritoneum and the muscular tissue is much denser on the fundus and the upper part of the body than on the lower uterine segment.

In a case I operated on recently for myomatous degeneration in a non-pregnant woman, I found,

however, the peritoneum so loosely adherent that it could be lifted up between the fingers an inch from the muscular coat. It had also a different color, being white and dull, instead of presenting the usual shining pink surface. It could with the greatest facility be torn off, like the broad ligament, from an intraligamentous tumor. But this is a unique condition. I have at least never seen it before, either in my own work or that of others. It is a similar condition to that known as dermatolysis, in which the derma contains so many elastic fibers that it can be pulled out everywhere to a great length like a sheet of rubber.

I take great care in closing the abdominal wound. First, I unite the peritoneal edges with a running catgut suture, then I unite the aponeurosis by means of chromicised catgut, using the cobbler's stitch, which takes a little more time than an overhand suture, but which is done with comparative ease with Marcy's needle. Finally, I unite the skin and subcutaneous fat with silkwormgut sutures, one inch apart, and place a superficial silk suture in the middle between each two and near the ends. For a time I tried Marcy's subcuticular suture, but had trouble with it and returned to the old way, which gives me a beautiful linear union, without showing any stitches.

When the aponeurosis is united, I like to wash the entire wound with a solution of bichloride of mercury. It cannot do any harm, and it appears to me as being conducive to primary union. After closing the wound, I dust it with eka-iodoform, cover it with iodoform gauze and apply a piece of guttapercha tissue, which sticks to the skin and forms a hermetical protection for the wound. Outside of that come sterilized gauze, absorbent cotton, broad straps of adhesive plaster, and a many-tailed bandage. At the end of a week the sutures are removed and replaced by narrow strips of rubber adhesive plaster and a similar dressing is applied as the first time, except the guttapercha tissue. The patient is kept in bed for three weeks in all. This rest I believe to be of importance to secure a solid union, and I deprecate modern advices to let the patient walk about after a few days. I am also in favor of the use for three months of a snugly-fitting abdominal supporter. To do without it while the cicatrix is still weak, invites hernia; to keep it too long weakens the abdominal muscles.

I can so much more freely recommend the method described, as I do not claim any part of it as my own invention. Paul Segond, Péan's genial pupil, has adopted it and calls it the "American method." As American gynecologists it behooves us to give due credit to Henry O. Marcy for the use of the buried continuous animal suture (1881), to T. A. Emmet for the retroperitoneal treatment of the stump (1884), to Lewis A. Stimson for the substitution of the direct ligation of arteries for the unsafe mass-ligature (1889), to William R. Pryor for having shown the advantage of coming from below upward on the second side (1894), and to Howard A. Kelly for having combined most of these ideas in a clear, precise form (1896). Thus America can claim not only to be the birthplace of abdominal hysterectomy, but gradually to have developed it to its most perfect form, the chief repsentative of the present period of operative gynecology, and a worthy companion-piece to ovariotomy.

CLINICAL MEMORANDUM.

A CASE OF CONFINEMENT FOLLOWING A SUPPOSED DOUBLE OVARIOTOMY AND COMPLICATED BY AN INTESTINAL HERNIA THROUGH THE OLD LAPAROTOMY WOUND.[1]

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A CONFINEMENT following a supposed double ovariotomy or complicated with umbilical hernia is not so rare an occurrence as to demand any special mention now; but, taking into account the double complications as presented in this patient, then such a case becomes of more than passing interest. The nearest similar case to this of mine, so far as I can ascertain and I have searched all the records at my command and also have written various authorities for their personal experiences, was one detailed in Dr. Kelly's work and is given further on.

My patient was very anxious as to the final outcome when she learned of her pregnancy, and I became almost equally anxious as to her prospects, and so I wrote to Dr. Humiston of Cleveland, Ohio, after consulting my Detroit colleagues as to their experience and what I might reasonable expect in my case. He replied as follows:

CLEVELAND, OHIO, June 21, 1899.

DEAR DOCTOR:—I received your letter of June 18th in due time, and in reply beg to say that personally I have had no experience in abdominal hernia following laparotomy when pregnancy had occurred, but I have attended a number of those cases who had an umbilical hernia, not the result of operation, and while they afforded some trouble, there was really no complications during the labor. It would be well to have it supported by a binder and band, or an abdominal belt that you can get from any instrument-maker, and I should not feel particularly concerned at the time of labor.

Sincerely yours,
M. M. HUMISTON.

I also wrote to Dr. Joseph Price, of Philadelphia, for his experience and his advice and the following is his reply:

[1] Read by title before the Section on Obstetrics of the American Medical Association, Atlantic City, June 5, 1900.

241 North 18th Street,
PHILADELPHIA, July 5, 1899.

MY DEAR DOCTOR:—Your patient will suffer more than usual throughout gestation, and the hernia ring may increase very considerably in size. Pain and tenderness about the opening is due, in all probability to some adhesions—omental and intestinal—she should wear a broad, comfortable support. Take advantage of her convalescence for closure of the opening. Free bowel and omental adhesions, split sheath of both recti and close. Keep her in bed for five weeks for a strong organization.

Yours faithfully,
JOSEPH PRICE.

I then wrote to Dr. Howard Kelly, of Baltimore, and below I give his reply. His case is the only one I can find in literature which approaches mine in its singular conditions.

1418 Eutaw Place,
BALTIMORE, MD., July 6, 1899.

DEAR DOCTOR LEONARD:—It gives me pleasure to answer your letter. There need be no added danger owing to the hernia. I would have the patient wear a snug bandage during pregnancy, and fit her with a good tight bandage when labor comes on, to keep the uterus from hanging in an oblique position. If you will look at page 467 of the second volume of my book you will see the figure of a similar case.

Sincerely yours,
HOWARD A. KELLY.

Referring to the page and work mentioned by Dr. Kelly I find this brief description of his case: "Hernia of the pregnant uterus in a negress. The uterus has escaped through a ventral hernia, due to a celiotomy May 3, 1894, of which the scar is plainly seen. The patient went to term and was delivered of a living child by a normal labor."

This case varies somewhat from mine in that the uterus came through the ventral opening; whereas, in my case, the uterus was all the time held back, and only the intestines were prolapsed through it, although the macroscopical appearance of my case was very similar to that shown in the illustration.

The only other case similar to Dr. Kelly's, so far as my knowledge goes, is the one recently reported by Dr. W. V. Anderson of Toledo, O. This case was reported to the Mississippi Valley Medical Association at its recent meeting. In this case there had been no laparotomy performed previous to the hernia of the uterus. Dr. Anderson entitles his case "Complete Hernia of the Uterus," and I condense it to the following: "A large, well-developed Polish woman, the mother of ten children, had been in labor for thirty-six hours. On examination it was found that the abdominal muscles had been separated to such an extent that the uterus had passed out between the recti carrying the aponeurosis in front of it, and the whole hung like a great pear, suspended by its cervical attachments, the fundus reaching nearly to the knees. The uterus was freely movable and the os was found to be fully dilated. The uterine contractions were good, considering the length of time the woman had been in labor, but the position of the uterus rendered them ineffective, for at each contraction of the uterus, the patient would make vigorous effort to help herself, and although the uterus would rise until its long diameter stood at a right angle to the body, the contraction and shortening of the abdominal muscles instead of assisting delivery, acted somewhat like a draw-string at the mouth of a pouch, so that the greater the voluntary effort the more it interfered with expulsion. Placing the patient under chloroform, the uterus was inverted and then steadied by an assistant while the forceps were applied (the head presenting L. O. A.), and she was delivered without difficulty of a girl weighing seven or eight pounds. The birth-canal was ample, and there was absolutely no cause for dystocia but the herniated uterus and consequent effect of the contractions of the abdominal muscles."

Now, as to the conditions met by me in my case: Mrs. D., of Irish parentage, aged twenty-six years, and married four years, was about four-months pregnant when she consulted me last July. She reported having been operated on nearly seven years previously and, as she supposed, both ovaries were removed. Some two years after her marriage she became aware that both of the ovaries had not been removed. She never menstruated regularly, the menses sometimes appearing once a year, sometimes twice a year, the flow being slight and accompanied with but little pain. This was the "normal condition" down to the time of the operation. After the operation, to her surprise, and to that of her mother, she became quite regular, the first menstruation occurring the first month following the operation and this regularity continuing down to the time of her pregnancy, four months ago (as she placed it), as it had been four months since she had menstruated and she had had "morning sickness" for the past two months. This led her and her family physician to think that she must be pregnant. She was in a fair condition of health, and, excepting the fear of serious complications, like the tearing through of the abdominal walls by the enlarging uterus at the time of labor, she was well satisfied with her new condition.

After quite careful examination, I confirmed the previous diagnosis of pregnancy; but, as to the prognosis, I was somewhat at sea, as I never saw or read of such a case; hence, the reason for the letters of inquiry addressed to Drs. Humiston, Price and Kelly, as above given. The hernia that was then presenting was, when she was on her feet, of the size of two fists, irregular in shape; this irregularity, in part, being due to different thicknesses of the integumentary coverings. Where the skin was the thinnest, there the swelling would be much the larger; at one place this covering was so attenuated that it seemed as

thin as parchment, and here was a grape-like protrusion of bluish tint; that was a little to the left of the median line. On lying down all this could be quickly manipulated back into the abdomen. The hernial opening was in the middle of the scar of the incision made some seven years before; it was about 1¼ inches in length, and you could not quite insert two fingers into the abdominal cavity through it; the marginal edges were quite thick and firm, except at the top and bottom; here they were very attenuated, and seemed as if they would easily tear to the full length of the original incision; the upper end is two inches below the umbilicus, and the lower end about that distance from the pubes; the scar is nearly ¾ of an inch in width, so much has it been stretched, and about four inches in length. The hernial opening is about in the middle of the longitudinal length of the scar, the middle of the opening being about 3½ inches below the umbilicus.

This being the condition of affairs, one had quite a different problem for solution than if it was pregnancy complicated with an umbilical hernia; for here, in my case, the uterus was bound as it enlarged, to present its fundus at the old laparotomy opening, and as the throes of labor approached and the contractions of the abdominal muscles to aid in expulsion came on, there was great danger of tearing the whole wall open; the parchment-like thinness of the upper and lower edges, and of parts of the cutaneous covering being the same, there was danger, unless one was guarding well the walls during labor, that one would get a complete rupture through the external abdominal surface as well.

She had been wearing an abdominal belt with a concave pad, and had succeeded, up to the time of her pregnancy, in keeping the hernia well in hand. But, with the pressure of the enlarging uterus to contend with, I advised a *convex* surface to the pad, and a more tightly applied band, as the hernia was enlarging all the time, this due to the uterine pressure from below.

In spite of these very peculiar and in some ways foreboding conditions, I took the cheerful side of the prognosis, and assured her that although I had never seen or read of a similar case, I believed her conditions were much more favorable than to have a forced abortion, as she had thought might be necessary; that I thought the dangers from the abortion would far outweigh those from labor at term, even with these peculiar conditions. To get further light for myself, and to reassure her as far as possible, I addressed the letters to my confrères, as above indicated, and I can assure you that all of us were heartily glad to get their messages of good cheer.

From this time onward she went on to nearly full term with cheerfulness and with a minimum amount of serious complications. The convex pad of about three inches in diameter and the quite wide and tight band of knitted silk and rubber seemed to hold both the intestinal hernia back and also control the presenting uterus, so that full term was reached with the patient in as good condition as falls to the lot of the majority of women. Our words of good cheer kept her buoyed up, and her desire for a living child led her to make willingly the sacrifices of exercise, etc., and during the growing times of the intra-uterine life of the child, she regarded this curtailment of personal pleasures as a pleasant sacrifice for her.

Having long since given up the practice of obstetrics, and also expecting that I might be absent from the city at the expected time of confinement, I asked Dr. A. H. Steinbrecher, of the Detroit College of Medicine, to look after the accouchment of the patient; he saw her at intervals leading up to the time of labor, and finally was hastily summoned a little before the time expected, to look after the final act of pregnancy. To his surprise, and to the surprise of all, the labor progressed rapidly through its various stages to completion, with little or no trouble from the hernia, or of danger of the uterus being forced out of the unadherent edges of the intra-abdominal wound. He had no difficulty in keeping control of the uterus by pressure over the old laparotomy opening; the weakened abdominal muscles delayed but little, if any, the various stages of labor or recovery. There was no trouble with the afterbirth, nor was there increased hemorrhage. The woman was delivered of a fine boy and she made an uneventful recovery from the confinement.

The subcutaneous opening is still there into the abdominal cavity, and the hernia still descends into it when the abdominal supporter is not used; but, otherwise, she seems not to suffer from her somewhat peculiar yet interesting (from an obstetric standpoint) deformity.

MEDICAL PROGRESS.

Spondylitis after Typhoid Fever.—A. Schantz, referring to this rare sequela of enteric fever (*Archiv f. Klin. Chir., Bd. 61 Heft 1, p. 605*) says that the first two cases were reported by Quincke and the third instance of the disease was recently published by Könitzer during the past year. The last case on record is that of the author with the following epitomized history: Female, aged thirty-six; married; no vocation other than housewife; taken ill early in April, 1899; admitted to the Leipsig Hospital on the 14th; severe typhoid fever; distinct rose spots; marked Widal reaction; early in the course appeared right-sided otitis media suppurativa and superficial ulcers on the sacrum; April 18th suppuration attacked and finally totally destroyed the right eye; May 26th patient was seen to be very weak in the legs, complaining of much pain on attempting to walk. June 1st discharged. Three weeks after admission she was suddenly attacked by violent lightning pains in the right leg with twitchings, also pain and total disability of the right shoulder. Two weeks after this pain of the same character appeared in the sacral region. Swellings were

palpable over the areas of pain. After discharge the patient suffered more and more from the pains and was confined to her bed. Although rest in bed made the pains less severe, they made sleep impossible. Her general condition deteriorated rapidly. During this interval several examinations, medical and gynecological, were made, without any diagnosis. The author saw her first on July 15th, while assisting at enucleation of the eye and made the diagnosis of spondylitis. There was tenderness on pressure over the lower lumbar vertebral spines, which on percussion awakened deep, dull pelvic pain. Muscular rigidity and fixation of the vertebral column were also distinct. No deformities. No swellings. Active patellar reflexes. No ankle-clonus. Light twitchings of the adductors. The right shoulder was in strong contraction. August 22d the patient was finally brought under treatment. During this interval she had become unable to walk. The usual orthopedic apparatus and jacket were applied with remarkable and prompt results. After six weeks she was able to sit up one hour daily, which intervals were slowly increased and attempts at standing and walking made. November 13th discharged with no pains, some weakness of the knees, normal reflexes. January, 1900, she was in excellent health, going about the house, taking walks an hour long, although still using the apparatus and exercising great care. The diagnosis here lay between an infection other than typhoidal of which the eye and ear disease may also have been expressions and a typhoid secondary invasion. The distinct and typical symptoms and course of the attack make it beyond doubt to have been a case of typhoid fever, followed by the foci of secondary suppuration. The first case of Quincke may not have been an example of real involvement of the bony so much as of the muscular structures, because it presented features which are not usual in frank cases of spondylitis. These facts were a tenderness over the lower lumbar and upper sacral spines which after four days shifted to the tissue adjoining them and after twelve days more was acute over the tenth and twelfth dorsal spines. Such variations of the site of pain and tenderness do not appear in true disease of the vertebræ. In the other three cases no such conflict between the histories of a Pott's disease of the spine and those quoted exists. It is possible that an existing, slowly progressive, entirely latent tubercular disease was excited to violent activity by the typhoid fever. But in the absence of any previous history pointing toward that condition and in the presence of the direct connection between the primary and secondary manifestations makes it very probable that the bacillus typhosus was responsible for the whole. The pathology of typhoid bone-disease and its symptoms elsewhere in the body are so well known that a review of the ordinary course one might expect of such a spondylitis will be instructive. Its occurrence will be in comparison with other typhoid osseous lesions as frequent as the parallel in tuberculous bone-disease, and its onset should occur at about the same time as the other foci of the bacillus typhosus secondary to the original invasion, namely, there will be very early, very late appearances and others just at the beginning of recovery. The very tardy cases will be difficult to differentiate from tuberculous lesion. The degree of the sickness will also vary between acute, subacute, chronic, temporary and prolonged attacks. The presence and absence of deformity will be according to age, rare in adults; and to destruction of the bone, absent when none has occurred. Abscesses also must occur in the long attacks whose contents alone will pronounce their identity as typhoidal. In general the sudden intense invasion soon after or in connection with the enteric state will suggest the origin, as will the presence of suppurating foci elsewhere in the body. Over 40 per cent. of all typhoid bone-disease show multiple scattered lesions, as in the author's case, shoulder, eye, and vertebræ. Finally with reservations Widal's reaction will aid. The treatment suggested is rest, maintained in the mild cases by simply keeping the patient in bed, in the severe and intense cases by applying suitable apparatus or jackets.

Erythromelalgia.—A short and comprehensive review of what is known concerning erythromelalgia is given by M. Kahane (*Klin. therap. Woch.*, May 20, 1900). In the earliest cases observed, the toes were affected and the disease then showed a tendency to spread upward, but since then the upper extremity or both upper and lower extremities have been seen involved and even internal organs, such as the brain, testicles, etc., have been the seat of the peculiar process. The pains, which are so prominent a feature, are of burning or stinging character and often extreme in degree. They may be paroxysmal, but later become continuous and may be intensified during the night and with hot weather. The discoloration may be of a bright red or more of a bluish hue and is diffuse or circumscribed, sometimes with nodulations. Hyperesthesiæ and paresthesiæ of touch and pain often occur. Of other nerve-disturbances there may be mentioned paresis of the limb, hyperidrosis and, in old cases, trophic changes such as sclerosis, atrophy, edema, rhagades, ulcerations and depraved nutrition of the nails. It is impossible as yet to explain the nature of the disease, since it is not even settled whether it is to be looked upon as an entity by itself or merely as a manifestation of certain disorders of the nervous system. The pathology, also, demands further study, but it is clear that in some cases neuritis and perineuritis, as well as diseased vessel-walls, are present in the affected parts, while the cord may show the lesions of tabes, myelitis, syringomvelia, etc. Several cases which seemed to depend on functional nervous disorders, especially hysteria, have been described, yet it is possible to have nothing but the local changes. The usual causes of neuritis,

such as exposure, overexertion, malaria, syphilis, etc., must also be regarded as bringing on erythromelalgia. There is no uniform method of treating; some do best with rest, elevation and the application of ice, while with others hydrotherapy, electricity and massage with ichthyol or ethyl chloride locally and the salicylates, antipyrine, ergotine or morphine internally may achieve a cure. When dependent on some underlying disease, this must be treated. The course is apt to be chronic.

Alcohol and the Death-rate.—Although the use of alcohol is an important factor in regard to the prognosis of disease, it seldom figures as the cause of death. Yet it is the direct cause of death, says Ch. Fernet (*Bull. de l'Acad. de Méd.*, May 14, 1900) in the accidents of drunkenness, such as injuries, exposure to cold, etc., or when excessive drinking results in a fatal acute gastritis, or gastro-enteritis, hepatitis, or pneumonia. It is a direct or more remote cause when it produces the ultimately fatal chronic conditions of arteriosclerosis, cirrhosis of the liver, interstitial nephritis, inflammation of the stomach and intestines, cardiopathies and meningo-encephalitis. By inducing delirium tremens or from having lessened the recuperative power of the body, it is an indirect cause of death through rendering more fatal such acute infections as pneumonia, influenza, erysipelas, etc., and certain traumatic lesions. More indirectly still does it cause death by reducing the resisting power, and rendering the body more susceptible to infection, or by causing abortion or the procreation of non-viable or mal-developed infants.

The Surgery of Liver Abscesses.—J. Smits (*Arch. f. klin. Chirurgie*, B. 21, Hft. 1, p. 173) mentions 21 cases of hepatic suppuration, of which 3 resulted fatally, although all were treated by operation. These cases all occurred in the tropics. The author describes the various surgical methods of dealing with the condition, puncture with aspiration or drainage, and the open operation with wide exposure, free immediate evacuation, and continuous efficacious draining of the abscess cavity. Puncture is valuable chiefly as a diagnostic procedure and it carries three dangers, namely, sepsis, damage to one of the main blood-channels resulting in fatal hemorrhage and entrance into a neighboring organ which may be intolerant of traumatism. As a rule, the exploratory use of the needle should be made part of the treatment and the operation should follow at the same sitting. After the needle has been driven through skin and muscle, it is stated as good practice to draw out and secure the piston so that a vacuum is made for a part of the capacity of the cylinder. The needle is then pushed in until this safety vacuum is filled with pus. In this way danger of passing the instrument through and beyond the abscess into sound liver-tissue is avoided. By making the aspiration part of the treatment the needle may be carried across the pleural and peritoneal cavities with scarcely any danger of infecting them. The author states that, although frequent deep punctures with large needles have been his rule, in none of his cases did he get a single bad result therefrom. After pus has been located he withdraws the needle until the pus no longer flows into the cylinder and then consigns the aspirator to an assistant who holds the needle *in situ* as a plug to its track against outward flow of the abscess-contents and as a guide for the evacuating incision. The mere puncture of an abscess and aspiration as curative measures are condemned on the grounds that they give no means of establishing complete evacuation or of providing against rapid recurrence of the pus. Eleven cases, with ten deaths and one recovery only after spontaneous rupture of the focus into the lungs, are cited as proof of his argument. The use of the trocar and cannula, followed by the insertion of a drain-tube through the latter before its removal, is also trustworthy. Its sphere is only as a temporary relief of superficial abscesses about to point through the skin, so that the patient may be more comfortably and safely transported to the hospital. The first radical operation is the simple wide incision obviously available only in foci at the stage of spontaneous emptying through the skin. As a curative measure it is usually insufficient but may be used like the trocar as a temporary palliative. Another crude and occasionally successful method is to open the liver along the aspirating-needle through the abdominal cavity, when adhesions may or may not have occurred, while the assistants force the liver against the parieties. The pus is then rapidly evacuated. Its successes certainly must have been due to abundant previous adhesions, but clinically the presence of these is often very difficult to establish in advance. None of the foregoing curative attempts fulfil the final indication of all abdominal and pleural operations, namely, the walling-off of the main cavities both during the surgical manipulations and during the after-treatment. The older methods of accomplishing these points consisted in the primary exposure of the organ, packing the wound with or without the suture of parietal and visceral serosæ, and, after sufficient delay for the establishment of the protecting adhesions, the secondary treatment of the abscess. Entire clinical success followed the use of this method in 16 out of 19 of the author's cases. The fatalities had no relation to the operative technic. The primary methods *per se* depend upon the immediate necessity for opening the abscess and are subject to two variations in detail, first, suture of the serous layers together before opening the suppurative site; second, tamponade of the adjoining approaches to the general cavity, then evacuation of the pus followed by suture of the peritoneal leaves directly or after creating flaps of the membrane to compensate for recission of the liver. The author's choice rests with the latter technic. In addition to the thoracic approach through pleural adhesions or through the parieties just distal to the

pleural margin, there remains the method of inevitable opening of the pleural cavity. Here, again, we have the primary building of adhesions and the subsequent evacuation, or the immediate suture and tamponnade of the pleural divisions and primary attack upon the suppurating liver. The pleural leaves may be sutured alone, together, or strengthened by flaps of diaphragm tissue. With care both methods result favorably. The last operation used by the author in one case with entirely good outcome was that of resection of the lower anterior thorax-wall after Lannelongue, adapted to abscesses beneath the costal cartilages. Here the cartilages of the eighth, ninth, tenth and eleventh ribs are exposed and resected, the parietal and visceral peritoneum managed in one of the foregoing manners, and the disease treated. The resulting damage to the thoracic and abdominal walls appears rather immaterial as the muscle-functions can by care be largely spared. The after-treatment is concerned with keeping the outer dressings clean, the drain-tubes patent and drainage active, and with the entire absence of irrigation, curettage stimulation or other interference with the abscess-cavity. Any such treatment may cause an extension of the disease or an obstinate flow of bile which would otherwise have been stopped by the processes of nature already present. The prognosis depends upon the early diagnosis and prompt thorough management of the disease. Great emphasis is laid on the fact that of the author's patients 11 had had intense single or repeated malarial attacks, while only 4 gave a history of dysentery and 1 of diarrhea. His treatment was distributed as to methods and results as follows: Primary and secondary operations, transpleural 12, cures 11; abdominal 6, cures 4; Lannelongue's operation 1, cure 1; primary and immediate evacuation, transpleural 1, abdominal 1, each cured.

Seasickness.—At this season of the year the suggestions in regard to the treatment of seasickness made by H. Partsch in the *Med. Rec.* (June 9, 1900) are most apropos. A long experience on ship-board has taught him that previous preparation is unnecessary and useless. Rooms amidships are preferable and good ventilation is extremely important. For the first few days, lie down most of the time, keeping the eyes closed and avoid excitement or tiring conversation. Whenever the slightest sensation of illness is felt lie down at once and close the eyes. Usually only one pillow should be used and if very ill no pillow at all. Seasickness is the result of the disturbance of the circulatory apparatus and the accumulation of blood in the relaxed abdominal blood-vessels. Retching is Nature's method of flooding the brain, and vomiting and nausea are merely incidental, not essential. An abundance of nutritive material is necessary. One should eat about seven times daily, and the sicker the patient the oftener he must eat and the less at a time. When seasick the easily-digested fluids are best, such as ale, porter, stout, broths, soups and meat extracts, the desires of the patient being considered. Food should always be taken at least ten minutes before arising in the morning, and when the patient is ill food should be taken without raising the head. The worst case of retching will be easily made comfortable in at least thirty minutes, by lying down without a pillow, closing the eyes and taking a pint of stout in six doses at five-minute intervals. Another food is made by mixing the yolks of two raw eggs with an equal amount of brandy and giving a teaspoonful at ten-minute intervals. The best time to take any beverage or food is just after a paroxysm of retching. Should it be taken before and thrown up, then take another dose immediately afterward and that will stay down. Severe headaches may be controlled by bromide of sodium in thirty-grain doses, to be repeated in one hour.

Recurrent Diphtheria.—In the *Med. Chronicle* (May, 1900) R. W. Marsden has reported three cases of laryngeal diphtheria treated by the antitoxin method which after entirely recovering from the original attacks had reinfections after twenty to twenty-five days necessitating in two cases a second tracheotomy. Another case of tonsillar diphtheria had a recurrence five weeks after the first infection. The question raised is whether these were cases of self-infection or due to a reinfection from without, and how long immunity from the disease lasts as a result of antitoxin injections. The author does not believe that exposure to the germs outside is necessary for the explanation of these recurrent attacks and when an attack has been terminated by the use of antitoxin, immunity from the disease may end at the expiration of three weeks. It is interesting to note that in each instance the second attack was of an exactly similar type to the original one, seeming to prove that the primary set of infection predisposes that part for some time to a reinfection. The author believes that during convalescence from an attack of diphtheria, the reinjection of antitoxin must be immediately performed upon the supervention of "croupiness" or signs of laryngeal stridor.

Bromide Treatment of Opium Habit.—Dr. Macleod of Shanghai reported in 1897 a series of several cases of the opium habit which he had treated by a method known as the "bromide sleep." He has since had three cases and of his series two deaths have occurred, one presumably of pneumonia and the other of a septic intoxication. In the *N. Y. Med. Jour.* (June 9, 1900) A. Church gives a detailed account of two such patients treated by the bromide method, one, a physician under his own care, gave very alarming symptoms of cardiac and respiratory disturbances during the treatment and seemed unlikely to recover. A slow but most satisfactory convalescence followed without any further desire for morphine and with a marked improvement in the general condition. The other case developed an exacerbation of a chronic nephritis

and died of uremia on the twelfth day. Enormous doses of sodium bromide were used by mistake in this latter case and probably induced the nephritis. Macleod's results were very satisfactory and obtained with greater certainty and more rapidly than by any of the ordinary methods. One hundred and twenty grains of sodium bromide are given every two hours in a half-glass of water until one ounce is given on the first day. On the second day a smaller amount is given and this may be sufficient or the doses may be continued on the third day. If the patient cannot be roused the administration may be ceased after twenty-four hours. The drug acts in a cumulative way and the sleep tends to deepen oftentimes for forty-eight hours after the drug is stopped. It is claimed that the intense suffering, vomiting, sneezing and cravings for morphine, which usually mark its sudden withdrawal, can be avoided by this method. The tendency to relapse seems to be reduced to a minimum, but the method is not without its dangers.

Rheumatoid Arthritis, Gout and Rheumatism.—The diagnosis of chronic rheumatism is, no doubt, very frequently made for other conditions, such as rheumatoid arthritis and gout, and yet it is very important that the mistake should not be made. An excellent article appears in the *Practitioner* (May, 1900) by A. P. Luff on the distinguishing features of these affections. Rheumatism in the chronic form usually affects the joints, but may not manifest itself as an arthritis at all, but by producing a chorea or erythema nodosum or by affecting the muscles alone. Salicylate of soda is a rough method of diagnosis for nearly every case of true rheumatism will respond to it. Chronic rheumatism never produces a marked deformity, such as lipping of the cartilages and bony outgrowths. The pain is usually more acute and flies from one point to another. The distinction between gout and rheumatoid arthritis is more difficult. Gout appears most commonly in males, among the well-to-do. It is improved by a restricted diet. The onset is sudden and obvious and usually begins in the feet with swelling and inflammation. Rheumatoid arthritis most commonly occurs in females and among the poor and ill-nourished, and is improved by full diet. The onset is insidious and there is at first no observable swelling of the joints. Although it ultimately affects many joints, it frequently begins in one of the joints of the thumb and gradually spreads to other joints especially of the hands. The temporomaxillary joint is never affected in gout but frequently in rheumatoid arthritis. Another important distinction is that a remarkable symmetry occurs in the affection of the smaller joints of the hands in arthritis but never in gout. This symmetrical nature of the disease has caused a nervous origin to be suggested, but the author does not believe this to be true, because the disease does not begin symmetrically. Furthermore the muscular atrophy is probably wholly of disuse, no reaction of degeneration is ever found and no anatomical lesion of the nervous system has been seen post-mortem. It is now believed to be an infectious disease and recently diplococci have been cultivated from the joints of an undoubted case of rheumatoid arthritis, which when injected into rabbits caused a similar articular disease to that from which the patient had suffered.

Tuberculosis in Colorado.—In Denver in 1893 the number of deaths from tuberculosis was 435; in 1898 the number was 501. In 1893 the number of deaths from tuberculosis specified as contracted in Colorado was 49, or 11.26 per cent. of all deaths from the disease; in 1898 the number was 99, or 19.77 per cent. This increase in the number of deaths from tuberculosis contracted within Colorado resulted in the appointment by the State Board of Health of a committee to investigate and outline a plan whereby the unnecessary spread of the disease might be restricted. G. E. Taylor (*Jour. Am. Med. Assoc.*, June 2, 1900), one of this committee, tells of the scope and results of the inquiry and of the measures agreed upon to lessen the spread of the disease. The scope of the inquiry included all possible sources of infection. These may be divided into three classes: (1) The expectoration of consumptives. (2) The milk from tuberculous cows. (3) The flesh of tuberculous animals. It is known that the expectoration of consumptives contains the tubercle bacilli and that these bacilli are the cause of tuberculosis in others. While the expectoration remains moist the bacilli are not distributed in the air, but as soon as it dries they are freed and float in the air, and are inhaled and cause the disease in others. Inasmuch as the danger increases as the sunlight and fresh air decrease, there is greater danger from indoor expectoration than from outdoor spitting. It has been proved, however, that there is danger of infection from the expectoration of consumptives even after thirty-five hours of exposure to direct sunlight. There is danger of infection from the expectoration of consumptives in all stages of the disease, even in the very early stages. Those liable to be infected from this source are: (1) The consumptive himself, who undoubtedly often reinfects himself by carelessness and so brings about a fatal termination of his disease which might have been conquered. (2) All persons who associate more or less intimately with the consumptive. (3) The public generally by the expectoration on the streets and in other public places. (4) Animals are liable to contract the disease from the expectoration of human consumptives. Cows suffering with tuberculosis may give milk containing tubercle bacilli. This may obtain without the cows presenting sufficient symptoms to arouse even a suspicion that they have tuberculosis. There is no doubt that milk from tuberculous cows is a great source of danger, and that attention should be paid to it. A large amount of investigation and

numerous experiments have demonstrated that the flesh of tuberculous animals may transmit the disease to those eating such flesh. Thorough cooking kills the bacilli, but so much meat is eaten rare that it should be subjected to thorough inspection. The writer cites that in New York City, for six years, the annual death-rate from tuberculosis per 100,000 among the Russian Polish Jews was but 76.72, while for the remainder of the population it was 427.75, and he wonders if their scrupulous care as to meat inspection has not something to do with their wonderful relative freedom from the disease. There are practically only two ways of determining the presence of tuberculosis among cattle, *viz.*, post-mortem inspection and the tuberculin test. The latter method, which the writer describes, is the only satisfactory one. When tuberculosis is discovered in a herd (1) the reacting animals should be branded and separated absolutely from the non-reacting animals; (2) the barn which they have occupied should be thoroughly disinfected; (3) no milk from the reacting herd should be sold; (4) it is not necessary to slaughter every reacting animal, for, unless the tuberculosis is general, the animal may be fattened for beef, provided a thorough post-mortem inspection is allowed. The following measures to lessen the spread of tuberculosis among animals and mankind in Colorado were agreed upon by the local and the State Boards of Health and are to be carried out by their officers: (1) The education of the public by a circular setting forth the dangers from expectoration and from the milk and meat supply, and the measures necessary to prevent the danger. (2) Public expectoration should be lessened by proper placards and be prohibited by ordinances in the larger places of the State. (3) All rooms where deaths from consumption are reported should be disinfected immediately by local health officers. (4) All insane asylums, prisons, reformatories, and hospitals should be required to keep tubercular and non-tubercular inmates separate. (5) Dairymen should be compelled to produce official certificates of freedom of their herds from tuberculosis before they are given permits to sell milk. (6) The employment of tubercular persons on dairy-farms or at milk depots should be absolutely prohibited by ordinance. (7) Ordinances should be passed prohibiting private slaughter-houses and requiring that all animals be slaughtered at public abattoirs under competent inspection. (8) The active aid of the public press should be enlisted in furthering all phases of this important work.

Operative Treatment of Simple Fractures.—W. A. Lane (*Lancet*, May 26, 1900) says the supposition that the surgeon can "set" fractures satisfactorily and retain them by splints is purely mythical especially those of the leg; also the idea that muscular spasm is the factor opposing accurate apposition of the fragments is equally fallacious. The muscles form ties between the end of the bones, and after a fracture these ties have their transverse axes increased by hemorrhagic and inflammatory exudate, and, therefore, their long axes must be shortened thereby, causing and maintaining deformity. This view is proven by the fact that under anesthesia with complete muscular relaxation, it often requires great force to replace the fragments in proper position. Failure to secure perfect apposition often leads to persistent pain, interference with the functions of neighboring muscles, and often causes changes in neighboring joints. In cases of simple fracture, especially in the bones of the leg, where accurate apposition (determined by radiograph) cannot be obtained, incision should be made and the fragments properly fixed by suture, peg, screw or other mechanical means.

Epicarin.—This new therapeutic agent is a combination product of kresolin and beta-naphtol, easily soluble in alcohol or ether. It is a powder of slightly yellowish color and has been proven free of any poisonous or inflammatory reaction. The action of epicarin externally applied is to produce mortification of the superficial layers of the epidermis and occasionally to produce a slight exudation. The scope of its administration is coextensive with that heretofore accorded to naphtol, namely, scabies and the dermatosycoses. In scabies the best method of application is a ten-per-cent. ointment. The annoying itching ceases very often after but one application of the ointment. In prurigo the most surprising results have been attained with epicarin. In this affection the entire body of young children was rubbed with the ointment as often as ten times without causing either albuminuria or other disturbances. In herpes tonsurans a ten-per-cent. alcoholic solution may be used as well as the ointment with good results. For scabies, eczema squamosum, etc., the following formulæ are suggested:

1. ℞ Epicarin 10.0
   Unguent. simpl. 100.0
   Ft. unguent. Ext. use.
2. ℞ Epicarin 10.0
   Spir. Vin. gallic..... 100.0
   Spir. Vin. lavand..... 25.0
   Glycerin 10.0
   M. Sig. As a wash.—*A. Kaposi* (*Wiener med. Wochenschrift*).

Inflammations in Serous Membranes.—In discussing the pathology of adhesions as they occur in the pleura and peritoneum, G. Muscatello (*Münch. med. Woch.*, May 15, 1900) states that the pure and simple desquamation of the surface endothelium is not sufficient to cause an agglutination between adjacent surfaces, but that this process must always be preceded by a true inflammation with exudation of fibrinoplastic material. Furthermore, the author emphasizes that when all the conditions necessary to produce cohesion between two surfaces are present, the fact that the endothelium has not been lost will in no wise interfere with the process, as has been recently stated.

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A WEEKLY JOURNAL

OF MEDICAL SCIENCE.

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SATURDAY, JUNE 16, 1900.

INFECTIONS AND DECREASE OF VIRULENCE.

No statement is heard more frequently at medical society meetings than that the ordinary infectious diseases are much less virulent than they used to be. A corresponding statement as to the mildness of our present-day writers is constantly heard from the "oldest inhabitants." As a matter of fact, consultation of the statistics of the weather bureau during the last sixty years, shows that the average temperature of our climate has not changed perceptibly within the memory of any one now living nor as long as statistics have been kept.

There is a tendency in human nature to remember early impressions very vividly and to exaggerate their importance in comparison with observations made later in life. Man remains as truly to-day as in Horace's time *laudator temporis acti se puero*, apt to think the past more significant than the present. The fact is, the more serious epidemics, just as the severer winters, produce a vivid impression that is regarded later on as the average, instead of the extreme, experience.

Improvement in hygienic conditions has undoubtedly limited the spread of contagious diseases and very probably modified their fatality. The change is not, however, as great as has been claimed by some of the older practitioners. The old contagious diseases, like bubonic plague, the history of which can be traced for millenniums, have remained absolutely unchanged in their essential characters and in the fatality they cause under favoring conditions. This persistence of the natural characteristics of certain diseases during centuries has been quoted by biologists as a convincing demonstration that species do not change under the influence of time and environment. Thousands of millions of generations of the bacillus of bubonic plague have come and gone since the disease first made its appearance in history, yet men are affected in just the same way as they were, according to the first historical accounts, and the mortality from the disease is not a whit the less to-day than it was originally.

In this question of the modification of virulence of contagions we are face to face with one of the great biologic problems, the variation of species. Either specific bacilli have lost their power to harm, a quality that is inherent in their essential parasitism, or man has gained in vital resistance a fundamental property that depends on his natural metabolism. Careful scientific observations have not been extended over a sufficiently long period of time to affirm or deny either of these propositions, but the probabilities are that neither is correct.

THE PATHOLOGICAL INSTITUTE.

WE present this week a temperate, dignified letter from Dr. Van Gieson which to a certain extent sets forth his attitude, as Director of the Institute, toward the position that has been assumed by the President of the State Lunacy Commission. Accompanying it are the protests that have been signed, attesting the high estimate in which the work of the institution is held and the resentment that is aroused by the present effort to suppress its research work. An indignant protest from Dr. Spitzka follows.

The men who have signed these protests are the leading neurologists and psychologists of the world. No more convincing testimonial to the value of the research work already done by the Institute, and the promise this work gives of future achievement, could be presented than is contained in these protests against the blighting influence of the Lunacy Commission. When we recall the fact that Dr. Wise himself is on record as extolling the work of the Institute and

bidding it Godspeed, and that the greatest minds of the world in this specialty are adding their testimony to the value of the work, wonder is aroused as to the cause of the new attitude assumed by the Commissioner. The sting of conscience in reference to opinions already expressed by him has come very suddenly and the question suggests itself: Why this change of heart? The longer the Institute exists and the more research work it accomplishes, the stronger grows the faith in its power to throw new light upon the subject of psychopathology.

The law announcing the purpose of the Institute distinctly includes pathological research. As we have said over and over again, the pathology of insanity is absolutely unknown. Dr. Wise speaks of the modern treatment of the insane and points to it as one of the triumphs of clinical observation and study, but every one knows that what he calls *the treatment of the insane is only the application to insane people of the ordinary rules of hygiene, sanitation and dietetics, together with the treatment of intercurrent medical and surgical diseases.* But treatment of insanity—the condition which justifies the presence of the insane in the State Institution—there is none. State hospitals are custodians of the insane, and bear very much the same relation to the inmates as the physician of the penitentiary bears to its inmates. Both look after the hygienic and sanitary conditions and both treat any intercurrent diseases or conditions that may arise. But no more treatment is known or applied to insanity, *per se*, than is known and applied to the mental or moral degeneracy that produces crime. Until some knowledge of the pathology of insanity has been gained there is no possibility of any scientific treatment of it, and the only hope of obtaining this requisite knowledge lies in the work instituted by Dr. Van Gieson of the New York Pathological Institute and in similar institutions. The interests of the insane, the interests of the State, the interests of humanity are enlisted in unravelling the secret with which the Institute is wrestling. As we said before, Hands off! Give it time and opportunity.

ECHOES AND NEWS.

NEW YORK.

New York Hospital Appointments.—Dr. Alexander B. Johnson and Dr. Percival R. Bolton have been appointed Visiting Surgeons to the New York Hospital to fill vacancies caused by the resignations of Dr. William T. Bull and Dr. Robert F. Weir.

Dr. Pilcher Honored.—At its recent Commencement, Dickinson College conferred the degree of LL.D. upon Dr. Lewis S. Pilcher, editor of the *Annals of Surgery.*

A New Gouverneur Hospital will be built immediately on the site of the present very much dilapidated structure at Gouverneur Slip, between Front and Water Streets.

The Presbyterian Hospital has just received a donation of $200,000 to be devoted to the erection of a new pavilion.

Censure of Bellevue Officials.—An inquest was held on June 6th in the case of an insane negro who died in Bellevue of internal injuries which he received during a violent struggle with three attendants. The attendants were not blamed, but the authorities were censured "for failure to discover the extent of the injuries."

Contagious Diseases.—For the week ending June 9, 1900: Measles, 419 cases and 21 deaths; diphtheria, 294 cases and 43 deaths; laryngeal diphtheria (croup), 7 cases and 5 deaths; scarlet fever, 101 cases and 7 deaths; smallpox, 4 cases; chicken-pox, 2 cases; tuberculosis, 203 cases and 139 deaths; typhoid fever, 31 cases and 4 deaths; cerebrospinal meningitis, 8 deaths; totals, 1079 cases and 227 deaths. Death-rate for the week ending June 10 in New York City was only 15.71 in a thousand as compared with 21.44 for the same week last year and 21.77 in 1898.

Insane Asylum Fete.—The patients and employees of the Manhattan State Hospital for the Insane held a carnival of sports May 30th on the grounds of the hospital on Ward's Island. One event was a basket-ball contest among the women. The "chronics" from the Verplanck Building, who were dressed in brown, played against the "acutes" from the branch buildings, who appeared in blue. The games were refereed by Dr. Archibald Campbell.

A Feigned Cripple.—One Henry Miller, twenty-six years old, was taken to the 125th Street police station on a charge of vagrancy. One arm was done up in splints and bandages and hung in a sling. His head was bandaged above the eyes. At the station he said he had just left the Mount Sinai Hospital. When it was attempted to remove his bandages he fought lustily and gave evidence of still having great vitality. The bandages were all removed, upon which Miller was found to have sustained no injury. He admitted having carried on the deception for three weeks. He was committed to jail for six months in default of a $500 bond.

Licenses for Maternity Hospitals.—The Appellate Division of the Supreme Court has affirmed the conviction of Louisa Wagner upon the charge of having violated a provision of the Penal Code prohibiting the maintenance of a ma-

ternity hospital without securing a license. The requirement of a license, the Court said, is to enable the public authorities to make proper sanitary regulations as to such institutions, so that their inmates would not be exposed to infection or the dangers that arise from improper medical attention, and also to insure that such institutions shall not be perverted to improper uses.

His Blood for a Price.—A man who called himself Joseph A. Reynolds wrote to Superintendent O'Rourke of Bellevue Hospital on May 31st, offering to sell a portion of his blood for transfusion to any "anemiated" person who might require it. This he wished to do "to save his wife and himself from starvation." The Superintendent made public the letter, upon which a number of reporters visited the so-called Reynolds. To them he divulged "the sad, sad story of his life and his real name." Some of these reporters were in reality detectives employed by the State of Massachusetts, in which State he is "wanted" for forging bounty checks. His own statements to these reporters have brought about his imprisonment. In the meantime an emotional public had read his letter in the daily press and had contributed sufficient to make "Reynolds" comparatively wealthy.

A Woman Swindler Imprisoned.—A woman who calls herself Mrs. Bridget T. Redmond was recently convicted of swindling persons from whom she collected subscriptions for the Guardian Angel Nursery at 98 Varick Street. It is said that her real name is Catherine Fay, and that she has already been convicted of a similar offence in Philadelphia. Justice McKean told her that she had not only swindled many honest people, but had by her actions tended to cast a doubt over the honesty of many persons making similar appeal for support. She was sentenced to one year's imprisonment in the penitentiary.

Resolutions Upon the Death of Dr. Gray.—The members of the New York Neurological Society wish to record their profound sorrow at the untimely death of Dr. Landon Carter Gray. As one of the earliest members of the Society, he was ever zealous in its behalf, and during many years of his activity added much to the interests of its meetings. His work was characterized by care and thoroughness in preparation; his thoughts were soberly presented in the light of a large clinical experience, and his conclusions were those of a sound thinker. In every line he wrote and in every word he spoke there was evidence of broad culture and refinement. He was a kind friend to many, disposed to help those who sought his counsel, and was always ready to allow for honest differences of opinion.

WHEREAS, the members of this society have sustained a severe loss in the death of their honored friend and colleague,

Be It Resolved, that this acknowledgment of Dr. Gray's estimable qualities be recorded in the minutes of the Society, and that a copy of these resolutions be sent to the *New York Medical Record*, the *New York Medical Journal*, and the MEDICAL NEWS.

B. Sachs, M.D., Chairman.
Charles L. Dana, M.D.
Frederick Peterson, M.D.

Death of Dr. Paul Gibier.—Dr. Paul Gibier was thrown from a buggy in a runaway accident and sustained a fracture of the skull on June 10th. He died a few hours afterward. The disaster occurred near the medical institute of which he was the head, at Suffern, New York. Dr. Gibier was born in France in 1851. He was a graduate of the Medical University of Paris. For his investigations of the cholera in Spain he received a gold medal and for his work upon the same disease in the South of France he was made a Chevalier of the Legion of Honor. His Government sent him to Florida and Havana in 1888 to study yellow fever and on his way home he stopped in New York City, whence he returned two years later and established the Pasteur Institute for the inoculation of persons bitten by rabid animals. The establishment at Suffern is a county branch. Dr. Gibier's successor in his work will be his nephew, Dr. G. G. Rambaud, who has long been associated with him.

Dr. Gibier was a man of magnificent physique. He never used tobacco or stimulants. He had become an American citizen, and was a member of the New York Academy of Medicine, the County Medical Society, and the Medical Association of New York; and was the editor of the *Therapeutic Review*. He succeeded in demonstrating the rabies microbe independently. He was greatly interested in psychic phenomena and he wrote a book entitled "Spiritisme: Analyse des Choses," which was translated in English under the title "Psychism: Analysis of Things Existing." He was a voluminous writer. By his will he left $20,000 to the Pasteur Institute, New York. His remains were cremated.

PHILADELPHIA.

Schools for Defective Children.—The Board of Education is considering the feasibility of establishing special schools for children who are mentally defective from organic causes.

Medical Club Reception.—The Medical Club gave a reception Saturday evening, June 9th, to Dr. Abraham Jacobi of New York, Dr. A. Garcelon of Maine, Dr. J. M. Bodine of Louisville, and Drs. Frank Billings and G. H. Simmons of Chicago. Over one hundred of the delegates to the American Medical Association were present.

Jewish Hospital.—The Lucien Moss Home for Incurables was dedicated June 10th. The building is connected with the Hospital proper and is built after the most approved style. Its donor also provided an endowment fund for its support.

Compulsory Vaccination.—The validity of this

law is to be tested by a case now before the courts. A girl of nine years has been kept out of school for two years because her father will not have her vaccinated. He has had recourse to several expedients, among them petitioning the Legislature, but has failed. *Seventeen physicians* are among the supporters of the man.

Health Report.—Deaths in the city for the week ending June 9th were 409, a decrease of 10 from the previous week and of 69 from the corresponding week of last year. Contagious diseases: Diphtheria, 82 cases, 15 deaths; scarlet fever, 61 cases, 3 deaths; typhoid fever, 51 cases, 9 deaths.

University Appointments. — The following have been made by the trustees: Dr. J. William White, Rhea Barton Professor of Surgery; Drs. Edward Martin and C. H. Frazier, Clinical Professors of Surgery; Dr. R. M. Pearce, Demonstrator of Pathology; Drs. W. F. Hendrickson and F. H. Howard, Assistant Demonstrators of Pathology.

American Laryngological, Rhinological and Otological Society.—The sixth annual meeting was held at Philadelphia, May 31, June 1 and 2, 1900. In his opening address the President, Dr. D. Braden Kyle, stated that chemical anatomy and pathology are of great importance and will in the future rank with pathological anatomy, etc. Examination of the inflammatory exudate accompanying influenza has convinced him that it differs from ordinary exudate and that there is as distinct an alteration in structure as in diphtheria or other specific infections. This differs according to the age of the patient, prior attacks, etc. Patients complain of a thickening of the mucous membrane after an attack and microscopical examination shows the presence of a peculiar albuminous material not unlike amyloid. This is probably manufactured in the blood as a result of the toxin of the disease. The best anesthetic for operations on the nose or throat is a good anesthetizer. Chloroform and oxygen, given by passing the gas through the chloroform, is probably as good as any anesthetic in use. No therapeutic agent is more abused than is the actual cautery in diseases of the nose and throat.

Dr. N. L. Wilson of Elizabeth, N. J., made a plea for early operation in "Bilateral Abductor Paralysis." Cases were cited showing the importance of doing tracheotomy or intubation before it is too late. Not every case should have operation as soon as seen, but the danger should be stated to the patient and early operation insisted upon. In discussion Dr. J. Solis-Cohn said that two cases had been saved by carrying tubes with them which the physicians inserted as soon as called. He would do a tracheotomy rather than intubation as the latter destroys the voice and the tube may be coughed out at any time, thus leaving the patient in as great danger as before. As to removing the vocal cords, which has been suggested, he would prefer to employ tracheotomy and other methods first, owing to the contraction which always occurs in a circular cicatrix adding a risk to the former procedure.

Dr. Robert C. Myles of New York exhibited an instrument for removing subglottic growths. Owing to slowness of the maker the instrument was not yet complete, but the principle was shown. It works by shoving the cannula down over the loop which grasps the growth, thus aiding in its retention.

Dr. Joseph S. Gibb of Philadelphia read the history of a case of carcinoma of the larynx. Total laryngectomy was done and the patient died the fifth day after, a streptococcic infection being present. The source of infection was not clear, as aseptic technic had been as thorough as possible. In future cases he would advise a preliminary tracheotomy in order to anchor the trachea and prevent tugging, and also to accustom the bronchi and lungs to this method of breathing. In the discussion which followed, the general opinion was that in cases which were well advanced a tracheotomy instead of laryngectomy should be done. This puts the affected part at rest and renders the patient somewhat comfortable until death results from the growth elsewhere. In closing Dr. Gibb stated that perhaps he was not so enthusiastic about laryngectomy since the case detailed had occurred, but that he was rather surprised at the pessimistic views of American surgeons. Something has to be done for these patients and tracheotomy at best gives only temporary relief. He believes it is better to remove the growth and give the patient a chance to recover or else to die in a few days from the operation.

Dr. Bernard Berens of Philadelphia presented a paper upon the internal use of suprarenal extract in nasal hydrorrhea. The patient was a woman who had a profuse discharge from one nostril after an attack of influenza, the flow being constant and amounting to from 16 to 24 ounces in twenty-four hours. Digitalin, atropine, and strychnine were given for their general effect, and various nasal sprays were tried with no improvement. An application of a twenty-per-cent. solution of suprarenal extract did some good. Five-grain tablets of the extract were then given, one every two hours. After the third dose the discharge lessened and soon ceased entirely. The dose was then diminished until one tablet was given three times a day, and, finally, discontinued. In a few weeks the discharge again began slightly, but the exhibition of the extract promptly caused it to cease. A report of the last session of the meeting will be given next week.

CHICAGO.

Training School for Nurses.—Dr. Sarah Hackett Stevenson delivered the address at the graduating exercises of the Mary Thompson Hospital Training School for Nurses. There were seven nurses who had completed the course and received diplomas.

Officers of the Physicians' Club.—The Physi-

cians' Club of Chicago recently held a business meeting and banquet, at which the following officers were elected: Chairman, Dr. William H. Wilder; secretary, Dr. L. Harrison Mettler; treasurer, Dr. L. Blake Baldwin; directors to fill vacancies, Drs. John M. Dodson, M. W. Bacon, and John L. Porter.

Mortality Statistics.—All the principal causes of death, excepting consumption, cancer and nervous diseases, showed reduced figures last week. According to the weekly bulletin of the Health Department, the mortality-rate is the lowest of any week of the year, and, compared with the preceding week, the following causes show the greatest reduction in number of deaths: Bronchitis, pneumonia, Bright's disease, diphtheria, and heart-diseases. The mortality from acute intestinal diseases and typhoid fever remains lower than last year, and the number of deaths from diphtheria was the lowest for months, there being only six deaths from this cause during the week. There was also a marked decrease in the number of deaths from measles, two last week, as against eleven the week previous.

GENERAL.

Tuberculosis in a Sheep.—Parts of a sheep seized in a London slaughter-house recently was the first authenticated case recorded in England of tuberculosis in that animal.

A Correction.—In the abstract of Dr. Woldert's article recently published in our columns, in connection with the American Medical Association meeting, Dr. Woldert was quoted as saying that the Anopheles mosquito is found near the North Pole; the variety of mosquito should have been designated as Culex.

The Xiphopages Twins Separated.—The two sisters, Rosalina and Maria, who were born joined together, a description and illustrations of whom appeared in the MEDICAL NEWS March 5, 1900, have finally been successfully separated by a continuation of the surgical procedure that was begun last winter. In the first operation the osseous structure joining them was cut apart, but the shock was so great that it was not deemed wise to proceed further. The operator was Dr. Alvara Ramos of Rio Janeiro.

Educational Medical Requirements.—At a meeting of the State Medical Council of Pennsylvania, held at Harrisburg June 8th, it was decided that the rule of the Council relative to the preliminary education of applicants for examination before the State Board should not go into effect until September 1st next. This will raise the standard in the educational qualifications and will make it impossible for the Council to recognize the licenses of other States that have not advanced to the same grade. It will also make it necessary to sever the reciprocal relations that now exist between the States of Pennsylvania and New Jersey.

Doctors in a Duel.—It is reported from Paris that on Sunday, June 10th, Dr. Samuel Pozzi, the celebrated obstetrician and gynecologist, fought a duel with swords with Dr. Devilliers. Dr. Pozzi was promptly wounded in the right hand, the sword of his adversary entering for a distance of three cm. beteen the knuckles of the middle and ring fingers. The code of honor was then declared satisfied, the combatants embraced and returned to the city. The little misunderstanding arose from some dispute connected with the management of a club of which Dr. Pozzi is president.

Neurasthenia from Reading Browning.—Professor Benedict, of the Department of Philosophy and Psychology of the University of Cincinnati, announced to his students on May 29th that readings from Browning will be discontinued owing to the great mental strain upon both professor and student. Lighter literature, such as the works of Plato and Aristotle, will be substituted.

The International Medical Congress.—According to instructions from Dr. A. Chauffard, Secretary-General of the XIIIth International Medical Congress, subscriptions to the Congress will not be received after the 15th of July, and the names of subscribers whose subscription is not received before the 15th of June will not appear in the official program. The publications of the Congress will consist of seventeen volumes, one one of which will be sent gratuitously to each subscriber; that is, the volume containing the papers of the Section under which he has inscribed himself. The other sixteen volumes may be purchased at price of 4 francs per volume, or 45 francs for the series.

To Control Consumption.—The Special Committee of the Health Board of Trenton, New Jersey, made recommendations on June 6th for the suppression of tuberculosis, declaring the disease infectious. The health officers are required to disinfect the room and destroy the bedding and clothing of consumptives immediately after death and physicians and hospitals are obliged to report all cases immediately after diagnosis, under a penalty including imprisonment. The department will make bacteriological examinations free of charge.

Amateur Surgeons.—Captain Bratton of the Medical Department at Sogod, Cebu, in the Philippines, has in a report to Surgeon-General Sternberg recommended for future consideration Private Samuel Jones because of his unusual exhibition of skill, judgment and fortitude. A native woman was assaulted by her husband, who cut her in a number of places and by whose violence she sustained compound fractures of the right forearm. In the absence of the regimental surgeon, Private Jones, with the assistance of Private Henry Becker, administered chloroform, and at night, by candle-light, sewed up the incisions in her chest and back. She would not have her arm amputated, so it was dressed antiseptically. Within two days gangrene set in; so

Private Jones amputated the arm by the circular method. The result was entirely successful.

The American Laryngological, Rhinological and Otological Society.—Officers elected for the ensuing year are: President, Dr. Robert C. Myles, New York; secretary, Dr. Wendell C. Phillips, New York; treasurer, Dr. W. H. Daly, Pittsburg; vice-presidents, for the Eastern Section, Dr. W. S. Renner, Buffalo; Southern Section, Dr. J. A. White, Richmond; Middle Section, Dr. N. H. Pierce, Chicago; Western Section, Dr. J. O. McReynolds, Dallas, Texas. The next meeting will be held in New York in May, 1901.

Obituary.—Dr. Melancthon Storrs died at his home at Hartford, Conn., June 9th in the seventy-seventh year of his age. He graduated from Yale Medical School in 1852 and during the Civil War served as a surgeon in the army. Upon his return he settled in Hartford, Conn., where he has since resided and practised. At the International Medical Congress in 1887 he was one of the vice-presidents of the Surgical Section. He gained distinction as a successful operator in the removal of the trifacial nerve and the restoration of cleft palate.—Dr. Eldridge K. Leonard died at his home, Rockville, Conn., June 13th, from blood-poisoning, aged sixty-nine years. Dr. Leonard assisted Dr. Storrs of Hartford, in the removal of an abscess of the liver of a Rockville boy some two weeks ago and and later took charge of the patient. Dr. Storrs died of blood-poisoning from the operation ten days later.—Dr. William Pierson, for nearly half a century one of the leading physicians of the Oranges, in New Jersey, died June 12th. He had been failing in health for about a year, and had an attack of pneumonia in February, from which he never fully rallied. He was the son of Dr. William and Margaret Hillyer Pierson, and was born in Orange, November 20, 1830. He was graduated from the College of Physicians and Surgeons in 1852, and a year later went to Orange to practise. He at once took high rank as a surgeon. He was recording secretary of the New Jersey State Medical Society for many years, and a week ago was elected president of the society. He was a member of the Essex County District Medical Society, of the New Jersey Academy of Medicine, and consulting surgeon of St. Mary's Hospital, Morristown, and of St. Barnabas' and St. Michael's Hospitals, Newark. He was one of the founders of the Orange Memorial Hospital and chief of its medical and surgical staff since its organization.

The Plague.—The progress of the plague at various points throughout the world still continues ominous; new cases are daily reported at Port Said and at Rio de Janeiro. In India the famine and the cholera have joined hands with the plague in its onward march. No new cases have been reported from San Francisco since June 4th. The Oriental population, numbering over twenty thousand, are not only defiantly opposed to quarantine, but are threatening murder to such of their number as have shown sympathy with the health authorities in their efforts to enforce sanitary measures. Open riots have been threatened in attempts to wreak vengeance on a Chinese merchant who had submitted to the Haffkine treatment, and on an undertaker who had conformed to health regulations in delivering bodies for autopsy. The courts have not sustained the Board of Health in arresting a Chinaman who had broken through the quarantine cordon. Various cities throughout the United States have taken warning from the outbreak in San Francisco and are cleaning up and keeping a sharp eye on the Chinese quarters; both New York and Chicago are conspicuous in this respect.

CORRESPONDENCE.

THE PATHOLOGICAL INSTITUTE.

To the Editor of the MEDICAL NEWS:

DEAR SIR: In the struggle over so great a cause as the freedom of research in psychiatric science, we, for our part, can never suffer the issue to be degraded by personalities. If, therefore, here or hereafter we refer to the struggles of the Pathological Institute of the New York State Hospitals or to the State Commission in Lunacy, it is in the vindication of a cause so precious to us that all personal feeling and animosity are set at naught. If this Institute be mentioned, it represents a principle and a cause; if this Commission or its Committee be spoken of, this also embodies an issue.

With our colleagues in the State Hospitals, of which this Institute is the center of scientific research, we confidently trust that there is now no issue. The Hospitals, it is a source of gratification to say, are in accord with the Institute in its endeavor to accomplish scientific investigations. A minor point of discussion at times between us has been the desire and needs of the gentlemen of the Hospitals to have greater facilities for clinical diagnosis and the use of clinical laboratory methods to follow up the condition of the patients. With this desire, we deeply sympathize. They are absolutely necessary to the actual carrying out of hospital practice. This, however, is the duty of interns; it should not occupy the time of men trained and occupied in the solution of scientific problems. The Institute has endeavored as far as possible to overcome this difficulty by giving instruction to members of the staffs of almost every one of our twelve State Hospitals in nearly every department of the Institute, in order that they might turn this knowledge to account in practical clinical work. (The endeavors of the Institute to aid in this manner the Hospitals in their practical clinical work is being set forth in detail in

the fourth annual report—now in press—of the Pathological Institute.)

The following are two protests. The first of these, with the accompanying letter, we handed on the 22d day of May, 1900, to the President of the New York State Commission in Lunacy at the Richmond meeting of the American Medico-Psychological Association, a few hours before he read his paper, "The State of New York *versus* the Pathology of Insanity," which had been announced on the official programs distributed a considerable time before the meeting. We did not submit to the Commission or any of its members the second protest; its purpose may appear in due time and suitable place. Inasmuch as the President of the Commission through indirect channels has secured this second protest and has seen fit to make it public in its incomplete form, we present it here with the names of all the gentlemen who up to the present time have signed it, either directly or by cablegram. Many other gentlemen have signed the first protest since it was handed to the President. [Since this date this protest has been endorsed unanimously by the Section on Nervous and Mental Diseases of the American Medical Association at its annual meeting, June 6, 1900.] These names have not been added, for it may be well to have the document appear just as it was submitted to the President at the Richmond meeting with the accompanying letter.

In view of the fact that but five days' time elapsed in the signing of the protest, and many gentlemen in distant places signed it *ab initio*, either by telegram or without knowledge of the other signatures, it must be held as a rather remarkable expression of sympathy in the struggle for the cause at stake, and would be a recompense for the sacrifices and vicissitudes of this Institute were its doom to be forthwith sealed. And yet such an expression of sympathy is not altogether extraordinary. For the liberty of thought and freedom of research in one of the greatest departments of knowledge is a principle that must endear itself to the hearts of our best thinking men. Disease of the mind is one of the most terrible blights that can befall the human race, and no boon could be more precious to mankind than an effort to add to our power of curing or preventing it, even although the attempt be slight and made in adversity. Hence it is that such attempts should be welcomed rather than opposed and a heavy responsibility must go with the arrest of an organized effort to add a humble share to the progress of psychiatry, an effort builded not without arduous toil and patient struggle.

IRA VAN GIESON.

1 Madison Avenue, New York,
June 6, 1900.

FIRST PROTEST.

NEW YORK, MAY 17, 1900.

Inasmuch as it is well known that the orignial purpose in the foundation of the Pathological Institute of the New York State Hospitals, was the scientific investigation of psychiatry, and that the former attempts of the Hospitals to pursue scientific investigation in the asylum under the direction and control of the Superintendents "produced no results of scientific value in the line of original work." (See Second Annual Report, State Commission in Lunacy, pp. 147—162); and since

We believe that the comprehensive lines of research formulated by the Director of the Institute and his associates are eminently suitable for this purpose and that the work of the Institute is most promising for the progress of psychiatry,

We, the undersigned, therefore deem most unfortunate any effort to interfere with or subvert the scientific work of the Institute, and we furthermore disapprove of any plan to limit the work of the Institute to the Asylums, and put the work of the Institute under the control and direction of Superintendents, and to divert the energies of this research center into routine educational schemes. And, furthermore, we deplore the methods in crippling the scientific activity of the Institute and in depriving it of sufficient maintenance and adequate quarters in the center of the city, by a legislative enactment forbidding the payment of rent.

(Signed)

EDWARD D. FISHER, M.D.,
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GRAEME M. HAMMOND, M.D.,
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FREDERICK PETERSON, M.D.,
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A. JACOBI, M.D.,
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WM. H. WELCH, M.D., LL.D.,
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J. H. LINSLEY, M.D.,
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S. WEIR MITCHELL, M.D.,
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WHARTON SINKLER, M.D.,
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Prof. of Ment. Dis. & Med. Jurisprud., Univ. of Penn. Neur. to Phil. Hosp., etc.
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FRANK C. FOSTER, M.D.,
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BURT G. WILDER, M.D.,
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MORTON PRINCE, M.D.,
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Chairman, N. Y. Section Am. Chem. Soc.
WM. McMURTRIE, Ph.D.,
Prest., Am. Chem. Soc.
WILLIAM W. JOHNSTON, M.D.,
Secretary Amer. Asso. of Physicians, ex-officio.
EDWARD G. JANEWAY, M.D.,
President American Asso. of Physicians, ex-officio; Prest. N. Y. Acad. Medicine, ex-officio.
WM. ROUMAINE NEWBOLD, Ph.D.,
Prof. Psychology, Dean Phys. Dept., Philadelphia.
EDWIN G. CONKLIN, M.D.,
Prof. Biology, Univ. of Penn.
CHARLES W. BURR, M.D.,
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WM. G. SPILLER, M.D.,
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LIGHTNER WITMER, Ph.D.,
Prof. Psychology, Univ. of Penn.
C. F. CHANDLER, Ph.D., M.D.,
Prof. Chemistry and Director of Chem. Dept., Col. Univ. Prest. (Parent Branch of International) Soc. of Chem. Industry.
J. T. ESKRIDGE, M.D.,
Prest. of State Bd. of Commissioners for the Colorado Insane Asylum.

ACCOMPANYING LETTER.

NEW YORK, MAY 21, 1900.

DEAR DOCTOR WISE—In view of the recent criticism and opposition to the principles underlying the work of the Institute, we have felt that it would be but fair not to rely merely on our own views as to the value of our work. We have, therefore, taken counsel with a number of leading men both in medicine and psychology. From the opinion of these men we cannot think of any changes which at present would aid us in our work. Therefore, we think we are all the more justified in maintaining our position. But if there are any minor details the following out of which would not interfere with the fundamental principles of our work, we are always glad to accept your suggestions.

Yours very respectfully,
(Signed) IRA VAN GIESON.

SECOND PROTEST.

In view of the fact that the Pathological Institute of the New York State Hospitals, founded by Dr. Carlos MacDonald in the year 1896, has been carrying on scientific research in Psychiatry on lines of investigation as worked out by Dr. Ira Van Gieson, the Director of the Pathological Institute and his associates, thus helping the further advance of Psychiatry; and in view of the fact that Dr. P. M. Wise, President of the State Commission in Lunacy of the New York State Hospitals, and Dr. Edward Cowles, Superintendent of the McLean Asylum, Chairman of the Committee appointed by the above named Commission in Lunacy, to sit in judgment and pass sentence on the work and principles of the Pathological Institute, have decided and have actually attempted under the plea of paternal guidance and legislative supply of resources, to interfere, subvert and destroy the scientific work of the Pathological Institute, handing it over to the "superintendency" of New York State Asylum superintendents, and putting psychiatric investigation under "their direction and control," according to the old asylum methods, to do as Dr. Wise insists "what the laboratories have always done in the State Hospitals,"

Resolved, That we, the undersigned, protest most emphatically against such a ruthless act of subverting and destroying a scientific institute of great promise for the science of psychiatry, and condemn the interference with the scientific research work of the Pathological Institute, and protest against the crippling of its methods and principles of scientific investigation, either by forcing it to labor in the old pathways of asylum routine or to become the "handmaid," as the Commitee puts it, of asylum men working at the will and command of asylum superintendents, or to divert its energies into educational schemes; and that we sustain the Patho-

logical Institute along its present lines of organization, and principles and research.

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DR. CHAS. MERCIER, M.D.,
London.

HUGH T. PATRICK, M.D..
Prof. Neur., Chi. Poly., Associate Prof. of Nerv. Dis., N. W. Univ. Med. Sch.

PROF. LUDWIG EDINGER,
Frankfort, Germany.

CARL WEIGERT, M.D.,
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JULIUS ARNOLD, M.D.,
Prof. Path. Anat. & Gen. Pathology, Heidelberg Univ.

WILHELM ERB, M.D.,
Prof. Special Pathology and Therap., Heidelberg Univ.

W. FORD ROBERTSON, M.D.,
Director of the Laboratory of the Scottish Asylum.

FREDERICK MOTT, M.D.,
Director of Laboratory of London County Asylum.

A. R. URQUHART, M.D.,
Editor *Journal of Mental Science*, Perth, Scotland.

THE ATTITUDE OF THE STATE COMMISSION IN LUNACY TOWARD THE PATHOLOGICAL INSTITUTE.

To the Editor of the MEDICAL NEWS:

DEAR SIR:—I find, associated with the names of four other physicians, my own cited in the paper published in your issue of last Saturday, attacking the Pathological Institute of the New York State Hospitals and in close proximity to charges of insincerity and duplicity. It is difficult to ascertain, in the mass of diatribe and innuendo which that unfortunate institution has evoked from Dr. P. M. Wise, at what persons these charges are especially aimed. Nor would I under ordinary circumstances find it necessary to defend myself against such charges, were they directed at myself. But, inasmuch as Dr. Wise additionally implies some lack of consistency and courage on the part of those connected with a petition mentioned as having been signed by us, I ask you to grant me space for a correction of such and similar false impressions derivable from the Doctor's remarkable paper. To others I leave it to find a proper characterization for Dr. Wise's procedure of publishing a petition prior to the completion of its list of signatures; as I also leave it to those who prompted a change in its wording to explain the reasons for such. Having had nothing to do with the original framing or later changes, I limit myself to declaring that I signed both petitions with cheerful alacrity, and would not have been deterred from so doing had either been expressed even more emphatically than the first. For example, I would have signed it if it had incorporated a prayer to the Governor for the removal from office of the present medical member of the Commission in Lunacy. Such a petition would speedily obtain more than the five signatures which it is the evident intent to pillory as those of isolated unfortunates too reckless to weigh the charges they endorsed, or too careless to have read over what they were asked to subscribe. Those signing a petition of the nature I suggest would find ample grounds in the record of an official who, without possessing any ascertainable qualifications for his high office, has made it the center of a pernicious activity, and utilized it to betray the interests of a profession to which—nominally at least—he himself belongs. Should the readers of the MEDICAL NEWS feel interested in a relation of the circumstances occurring after Dr. Wise took office, on which this statement rests, I shall feel justified in occupying further and more space than I venture at present to ask for. In the same connection I may be able to convince our colleagues that if the charge of insincerity be applicable anywhere, it is to the plea of economy when advanced by the critic of the Pathological Institute.

More problematical even than the reasons for the Commissioner's economical solicitude, appears his championship of interests in connection with psychiatry of any scientific character whatever, since the basis on which an estimate of his qualifications in this respect could be made is not available. However, this is not a very important question, for it is quite evident from the Doctor's paper that the more earnest his interests, the more meddlesome and demoralizing would his supervision of the work of the Pathological Institute prove. I refer to the statements about the work done formerly at one of our State Institutions, and which I proved to be of a misleading character (sustained therein by all authorities at home and abroad who have touched on related questions) and showed also that the results had been diverted and distorted for "business" purposes of a quasi medico-legal nature.

It had been Dr. Wise's duty to familiarize himself with the real status of the work done at Utica. It surely had been easy for him to do so. If I err not, he was himself in a position to have familiarized himself with that work, and at the very least ought to have become conversant with the real sources of its failure. He might have learned through whom the special pathologist had been appointed, and by whom he was sustained and kept in place in the face of overwhelming criticism. He would not then have presented a petition signed by all or nearly all the Superintendents under his thumb—among whom are most estimable practical alienists and several men of too much intellectual breadth to have been spontaneously overanxious to have signed that document, had they had certain knowledge which was not within momentary reach. On the contrary, he would in all consistency have been compelled to select one of their predecessors as a terrible example, illustrating the

fallacy of his position and the fallacy of a petition advocating a direct personal control, by the signers of the latter. The work at Utica failed under the domineering influence of the most autocratic superintendent this State has known and under a pathologist maintained in place by him; for as completely was Theodore Deecke the instrument of Dr. John P. Gray, as one man ever has been of another man. Does Dr. Wise wish to use the Institute in like manner? Dr. Wise, by the way, designates that unfortunate pathologist as "a philosopher not a physician." What Dr. Wise intends by this discrimination I fail even to guess. I venture to suggest, however, that a very little of the article commonly regarded as philosophy, nay a modicum of much-abused (not a little so by Dr. Wise) common sense, would have been of service to Theodore Deecke's master, who *alone* was responsible for absurdly interpreting artificial precipitates—as proving "mania and melancholia" to be "manifestations of one and the same diathesis," because manufactured by one and the same erroneous method, by one and the same mistaking pathologist, in one and the same asylum laboratory.

Here was Dr. Wise's ideal of the clinician stepping directly from the ward filled by living clinical pictures to the microscope under which had been placed the prepared section from the deceased subjects who had in life presented such pictures. What was the result? Read the comments of the best critics of the day; "strange views" is the most complimentary allusion they made!

The gracious courtesy with which Dr. Wise states that Dr. Van Gieson may be of unsound mind and even suggests that his case would fill a special clinical pigeon-hole would justify reciprocal courtesies by Dr. Van Gieson, say, in the way of an analysis of narrow characters in places too wide for them, or of red tape-fed barnacles, jealous of their little all; official prerogative by letter of law. But, possibly, Dr. Van Gieson believes such attacks as Dr. Wise makes to leave the man making them in too hopeless a state to render any stimulus of counterirritant useful. For Dr. Wise is in this alternative position: Either he believes what he says, and that Dr. Van Gieson is mentally diseased; in which case he exemplifies the notions of philanthropy and charity to the insane acquirable at the largest State Asylum (Dr. Wise served at the Willard State Hospital) by triumphantly taunting a thus disabled adversary with his great misfortune; or he casts a stigma knowing the statement to be untrue. I prefer to pause here. The reader may draw his own conclusions. Mine may be inferred from the fact that I fail to discover any signs of mental disorder in the assailed pathologist, and that I do not consider it probable that one of his performing power is likely to be affected with a latent taint that Dr. Wise, and Dr. Wise alone, were able to discover. I say this seriously, because it is a serious charge made by the medical member of the Commission of whom the insane are the official wards, and made not in an unguarded moment, nor flippantly, but in a widely-circulated periodical, perused by reflective readers, and in the course of a discussion inaugurated in a paper read before the National Association of asylum physicians. I may, however, express a reflection which must occur to your readers, that if the work at the Pathological Institute is of a high character, as Dr. Wise admits in another place—work which has been and is mainly planned by Van Gieson—it were desirable for Dr. Wise to no longer withhold the name of the clinical form of that investigator's mental "symptom-group"; I should like to know where the article may be obtained. If inoculable I know a few who might profit by the publication of Dr. Wise's secret!

There is one point in Dr. Wise's exposition of the situation in which he is accurate; it relates not to any scientific question, but to that "letter of the law" so resourceful to political and legal combatants not necessarily of the highest order. It is true that the Commission has the directing power over the Institute. But Dr. Wise is mistaken if he believes the interpretation of this clause—which was undoubtedly intended as what it appears to the reasonable, *i. e.*, a courtesy to authority—to rest with him. Science never flourished in a Procrustean bed of the Wise kind; it is with the masters that the interpretation rests, not with those who have not even served their apprenticeship. It is difficult to define a control which is not all control, but there is a practical illustration available which may be taken as involving precedent and principle.

By letter of the law, our President is Commander-in-Chief of our land and sea forces in time of war. But does the President interfere in the conduct of campaigns, hamper admirals by counterorders, disband this brigade in the field, remove that officer while under fire, call truces or break them without previous knowledge and request of those directly involved? If he did, he would justify such a procedure as rumor attributed to Admiral Dewey, namely, his intentionally breaking or avoiding his cable connections with a naval department which it was apprehended might embarrass him by blundering interference in a position sufficiently critical without such. Similarly need Dr. Van Gieson be declared guilty of insubordination when an important interest is jeopardized by ill-timed and inexpert meddling.

No doubt sticklers for the "letter of the law" will justify the claim of Dr. Wise to order special work, even of the "bed-bug exterminator" analysis kind, to which your recent editorial refers. But it would so stultify itself thereby that the aroused sentiment of the profession would drive it to its proper domain of bureaucratic control. When I reflect on the high plane of the work begun and projected in a pure conception of that correlation of sciences so puzzling to Dr. Wise, and learn that through medical politics—the worst form of politics—that work is hampered

and the workers dispirited, I feel an indignation like that of him who sees a clumsy foot crush a delicate mechanism, a rude hand defile a work of art.

I trust your journal will continue to sustain the Institute to whose director it is no reproach that in the kind of warfare forced on him in so ignoble a spirit he does not display the wirepulling adroitness possessed in the opposition. Science and that grade of cunning required in the latter art are rarely, if ever, united in the same "symptom-group."

In conclusion, permit me to anticipate surmises as to possible personal interest in the Pathological Institute of the New York State Hospitals. How absolutely little I have had prior to this date may be judged from the fact that I have never been inside of it. This admission in turn may be utilized as a proof of my unfitness as a critic. But it can be so utilized by those who are unaware that a judgment may rest on the perusal of published results and by such alone.

It is true that the Institute has not yet solved the pathological problems of insanity. It is conceivable that neither it nor any contemporary laboratory may entirely succeed. But it is certainly working in the direction in which all legitimate research seems to be moving. Mention the name of Van Gieson at American or European laboratories, and it will be recognized. Possibly the aptly-worded "methods not matter" criticism, which is made use of by the Wise investigating committee, may be here interjected. Without disputing it, though indeed it is most disputable, it is not well to devise and practice reliable "methods" before manufacturing such "matter" as the "alienists" of the school of which Dr. Wise was a pupil foisted on us?

E. C. SPITZKA.

New York, June 5, 1900.

OUR LONDON LETTER.

[From Our Special Correspondent.]

LONDON, June 7, 1900.

THE INTERNATIONAL CONGRESS OF GYNECOLOGY AND OBSTETRICS — BOYCOTT BY THE LONDON TEACHERS—CASUALTIES IN THE SOUTH AFRICAN WAR—SNARES OF INSURANCE COMPANIES FOR MEDICAL MEN—THE USE OF PRESERVATIVES IN FOOD—LECTURE BY PROFESSOR DEWAR ON "A CENTURY OF CHEMISTRY"—FLORENCE NIGHTINGALE'S EIGHTIETH BIRTHDAY—WANT OF CONSULTING PHYSICIANS IN THE SOUTH AFRICAN WAR—LATENCY OF TUBERCLE BACILLI IN THE TISSUES PRODUCING A RELAPSE OF LUPUS MANY YEARS AFTER RECOVERY.

THE success of the forthcoming International Congress of Gynecology and Obstetrics is seriously threatened by an extraordinary and unanimous resolution of the teachers of gynecology and obstetrics to take no part in it on the grounds that those who issued the invitation have assumed a representative position to which they are not entitled. In reply to a letter addressed to the medical journals making public this resolution, Dr. W. J. Smyly, President of the British Gynecological Society, Dr. MacNaughton-Jones, Chairman of the Organization Committee of the Congress, and Dr. A. E. Giles, Honorary Secretary of the British Gynecological Society and of the Organization Committee of the Congress, explain that the invitation was issued by the British Gynecological Society which is not concerned to defend itself against the opinion of the objectors. They point out that if the names of the Fellows of the Society are not sufficient to correct the opinion that they have wrongly assumed a representative position, the fact that the Permanent Committee of the International Congress of Gynecology and Obstetrics requested the Society to issue the invitation shows that its representative character is recognized abroad. Accordingly, Dr. Robert Barnes, Honorary President of the British Gynecological Society, gave the invitation at Amsterdam in 1899. The manner in which the president of the forthcoming Congress, Prof. A. R. Simpson of Edinburgh, was elected is also objected to. To this the officers of the Gynecological reply that he was nominated at a meeting of the Council on whom the duty necessarily devolved. This controversy is much to be deprecated and no doubt behind it are motives which do not appear on the surface.

According to official returns the total casualties of the British forces in South Africa up to May 12th were 20,108. These are composed as follows—Killed in action, 2322; wounded, 10,701; missing and prisoners, 4549; deaths from disease, 2492; accidental deaths, 54. The sick now in hospital are not included in this list. Of those enumerated as wounded a large percentage have returned to duty. The deaths from disease average 300 a week and form nearly 50 per cent. of the total mortality, so that the number of men in hospital must be very large.

The reputation of the average medical practitioner in this country as a man of business is notoriously bad and he, therefore, easily falls a prey to designing persons. A bait is now being held out to catch unwary ones by a new insurance company. On condition of taking up shares they are appointed medical examiners at large fees. For an insurance of £100, £1.1 is to be paid; for larger sums the amount is greater, rising to £3.3 for £500. When these alluring terms have had due effect it is explained that the doctor is expected to take up shares "which are payable in full on application." Thus, cash would be parted with at once to a company, which does not even profess on its own forms to be registered, in the shadowy hope of professional fees.

At the meeting of the Departmental Committee appointed by the President of the Local Government Board to inquire into the use of preservatives and coloring matters in food, Sir T. Lauder Brunton gave very important evidence. He has come to the conclusion that it is almost impossible to prevent the use of preservatives, but that their use should be strictly regulated. If

preservatives are not used there is a risk of eating decomposing food. The presence, nature and proportion of the preservative in each article of food should be announced by label or otherwise. Dr. G. Vivian Poore pointed out that besides the positive harmfulness of certain preservatives the negative side of the question was most important, as there ought to be to risk of mistaking fresh for preserved food.

At the Royal Institution Prof. Dewar gave the fourth and last of his course of lectures on "A Century of Chemistry in the Royal Institution." Continuing his account of Faraday's observations, he described the second stage of that investigator's work in the liquefaction of gases. He discovered benzene, which forms the basis of the whole coal-tar industry. His work in organic chemistry received great extension at the hands of Sir Edward Frankland, his successor, the scope and variety of whose researches made him second to none as an experimenter of the modern type. His work was largely identified with organic synthesis and he made elaborate researches on water-supply and on the manufacture of coal-gas. Referring to Dr. Gladstone he said that his name would be remembered for his study of the relation between the refractive index of bodies and their density.

Florence Nightingale, who won world-wide fame by her services to the sick and wounded in the Crimean War and was the pioneer of skilled nursing, has just celebrated her eightieth birthday. She received numberless congratulations, thoughtful gifts and flowers. None was more prized by her than a basket of choice blossoms sent by no fewer than 650 former "Nightingale nurses" from St. Thomas' Hospital and the Notting-Hill Infirmary—nurses trained for hospital and poor-law work through her great gift of £50,000, which a people's gratitude asked her to accept on her return from the Crimea. Accompanying this offering was an album containing a letter of congratulation, expressing gratitude for the benefits which she had conferred on the signatories by creating a noble calling for women. Miss Gordon, the matron of St. Thomas' Hospital and Superintendent of the Nightingale School, made the presentation. Amongst those who signed the latter were two of the original probationers of the School who joined forty years ago, and matrons and nurses from Australia, America, the seat of war, West Africa, India, Canada, Russia, and all parts of the world.

Speaking at the dinner of the Pharmaceutical Society, Sir James Crichton Browne expressed regret that, while a number of eminent consulting surgeons had been sent to the seat of war, a few eminent physicians had not been sent also. The long lists of deaths from enteric fever were nearly equal to those from wounds. The deaths from that disease were mounting up daily out of all proportion to the strictly military casualties which, thanks to Lord Roberts' splendid strategy, were now trifling. Every death from enteric fever must represent four cases of disease which must be causing an enormous disability in the forces. Enteric fever has always been prevalent in South Africa, but the occurrence of the disease at so many Stations, some of them in typically healthy situations, suggested careful inquiry so that precautions might be taken. To say that nothing could be done in the medical treatment was fatalistic folly. There was no disease in which skilled supervision could do more to prevent death and promote recovery.

At the Polyclinic Mr. Jonathan Hutchinson showed an interesting case illustrating the possible latency of lupus germ-cells. The patient was a young woman, aged twenty-nine, who was treated for lupus vulgaris eight years ago. After repeated applications of nitric acid the lupus was completely cured, nothing remaining but a thin, pale scar. This condition persisted for seven years; then two minute spots of lupus-growth appeared at the edge of the scar. This case shows that the tubercle bacilli of lupus may remain absolutely latent for many years. Mr. Hutchinson has observed another similar case in which, after the cure of a lupus-patch by cauterization, the scar remained healthy for thirty years; then a relapse occurred. It is impossible to suppose that in such cases a fresh infection of the subject has taken place, for the recurrence is always close to the scar of the original disease. The bacillus must remain in symbiotic union with the tissues without showing any activity until the vitality of the part, having been lowered by age, illness, or exposure to cold, is liable again to manifest signs of activity.

TRANSACTIONS OF FOREIGN SOCIETIES.

British.

THE WOUNDED IN THE PRESENT WAR—CHANGES IN THE BLOOD IN DISEASE—UTERINE FIBROMATA—LAMINECTOMY FOR PARALYSIS.

AT the May 8th meeting of the Royal Medical Society, TREVES described the wounds as much less extensive and fatal than with the old arms. Vital parts were often pierced without fatal results. Clothing was much less often carried into the body than formerly. Cases of nerve-trunks and bone-shafts pierced, as with a gimlet, with a minimum amount of damage were cited. The bullets from Mauser rifles were retained in 20 per cent. Hemorrhage, except in short range wounds, were rare and usually easily controlled by the soldiers. This was not the case in abdominal wounds at short range. Fractures were more commonly transverse than oblique as formerly, did well if left for a time in the field-hospital, but suffered often from the long transportation necessary. The more serious bone lesions appeared to be in the head of the humerus and about the lower end of the fibula. Injuries of the head often made wonderful recoveries but usually required prompt operation. The abdominal cases left alone recovered in 60 per cent.; operated on, fewer recovered. The shock appeared as the chief symp-

tom and long transportation as the least favorable condition. The intestinal wounds were usually minute and the impact paralyzed peristalsis. Indications for prompt abdominal operation were as follows: (1) When the case was seen within seven hours; (2) when the transport had been short and easy; (3) when the wound was anteroposterior, above the umbilicus, and the bullet had escaped; (4) when there was extensive hemorrhage; (5) sometimes when the wound was below the umbilicus with hemorrhage and escape of the ball. Contraindications: (1) When the case was not seen within seven hours; (2) when the transport had been long and arduous; (3) when the wound was transverse or oblique and above the umbilicus; (4) when the ball was retained; (5) when the liver and right kidney were involved, because these usually recovered; (6) when the wounds were below the umbilicus, for the same reason.

Surgeon-General Jameson concurred with Mr. Treves in the statement that the field-hospital should be as near the firing line as possible to avoid the damage of long arduous transportation.

At the meeting of the Pathological Society of London, May 1st, WRIGHT in discussing blood-changes said mere enumeration of red and white cells does little good. Bacteria are more important, but they occur in few diseases. The discovery of nucleated cells, myelocytes and normoblasts in pernicious anemia is important, but after all the present methods of blood-examination are not of definite diagnostic value apart from other symptoms. Some years ago he thought he had found the cause for hemophilia in an alteration in the number of polynuclear white cells in children. Later he abandoned his conclusions on proving that 40 per cent. of all children had the same condition. The rapidity and completeness of coagulability were new and important data. In hemopysis and aneurism if we could raise them much good could be done. Starvation will not do it. Hearty eating often does. Next came estimates of the lime salts as an index of the coagulability. Increasing the salt hastens the rate. The number of white cells also has a similar effect, realized by giving thymus-gland tabloids. Alkalinity is another important factor, as is the amount of agglutinin. Much of it was favorable for the course and prognosis in typhoid and some other fevers.

Dr. Lorrain Smith said he had measured the total quantity of blood, of oxygenating power, and total amount of hemoglobin per unit of weight to the individual. The study of anemia on this method showed that there were two types —that of chlorosis in which the total oxygenating power is normal, while the volume is increased, and that of anemia due to hemorrhage, in which there is really loss of hemoglobin.

Drysdale pointed out that the red and white cells vary independently of each other. Hence there is little value in making counts only of either or both.

At the meeting of the Obstetrical Society of London, May 2d, WILSON claimed both a casual and often a causal relation between fibromata uteri and organic disease of the heart. The cardiac lesion may be caused by the uterine or depend on the same factors. Circulatory pressure-effects might directly damage the heart or interference with the ureters might set up renal, then cardiac, trouble. Anemia due to menorrhagia might be a source of disease. Cardiac hypertrophy occurs in pregnancy and might in fibroids and by the persistence of the trouble go on to dilation. The presence of such cardiac lesions contraindicates ergot, but usually strongly indicates operation at an early date to prevent the cardiac element from becoming fixed.

At the Edinburgh Medico-Chirurgical Society, May 2d, COTTERILL showed a patient on whom he had done laminectomy for paralysis of two years' duration. Caries had begun when the patient was thirty-six years of age; complete paralysis, both motor and sensory, was present as far as the anterior superior iliac spine; the deep reflexes were exaggerated, the superficial ones various; two large bedsores were present on the buttocks; cystitis and incontinence of the bladder and rectum appeared. The laminæ and spines of the eighth, ninth and tenth dorsal vertebræ were removed. Pressure due to exostoses had narrowed the canal to the diameter of a slate pencil. The lumen was restored. Sixteen days after operation all symptoms began to improve, sensation, motion, continence returned and cystitis disappeared. One year after it he was walking with canes and still gaining.

SOCIETY PROCEEDINGS.

AMERICAN MEDICAL ASSOCIATION.

Fifty-first Annual Meeting, Held at Atlantic City, N. J., June 5-8, 1900.

SECTION ON DISEASES OF CHILDREN.

(Continued from page 944.)

SECOND DAY—JUNE 6TH.

Infant-Feeding.—The morning session was devoted to the consideration of infant-feeding and to diseases of the digestive tract.

Dr. A. L. Sherman of New York demonstrated a "home milk modifier." This consists of a graduated glass measure having seven sides or panels. One panel is graduted for ounces, the other six have various percentage formulæ. Nothing is more accurate except laboratory modification, and the simplicity of the method is its valuable point.

Typhilitis, and Appendicitis in Children.—Dr. J. N. Byrne of New York read this paper. Few cases of typhlitis or perityphlitis are primary. Inflammation of the appendix is always accompanied by more or less inflammation of the peri-

toneum. Foreign bodies do not play the rôle in the causation of appendicitis that they were formerly supposed to do. The infrequency of stricture of the appendix before the twentieth year of age raises the question of its later frequency being due to inflammation or to physiological retrograde changes in the organ.. Evidence points to the latter. Many cases of intestinal trouble, "biliousness," etc., are due to disease of the appendix.

Milk in Berlin Hospitals.—Dr. Louis Fischer read a paper on "Milk-supply and Control at the Kaiserin Friedrich Hospital by Drs. Adolph Baginsky and Paul Sommerfeld, of Berlin." The arrangement of the stables, care and feeding of the cows, etc., was given in detail. The hospital now has a stable of its own as well as controlling several milk-dealers. Reliance is placed on chemical examination of the milk as a test. The cows that are fed on dry fodder, potatoes, slops, etc., are apt to cause diarrhea and milk from such cows has a toxic effect upon the children using it. The milk is filtered and put in cans in the dairy adjoining, drivers and other employees not cleansed for the purpose are not allowed to enter this building. All cows are tested by tuberculin. At the hospital the sole duty of one maid is to prepare the milk for the infants. Both the full and mixed milks used are sterilized in bottles for thirty minutes at a temperature of 100° to 101° C. The writers do not approve of the criticism against the sterilization of milk. If Barlow's disease comes from sterilized milk it is from that which has been kept for a length of time in storage. Pure milk does not agree with dyspeptic children and dilution is absolutely necessary.

Infant-Feeding.—This was the subject presented by Dr. Alexander McAllister of Camden, N. J. Our present knowledge of chemistry has failed to produce a synthetic breast-milk, advance being needed in this direction. A plea was made for a closer adherence to Nature's methods. Two conditions must be met—an alarming disinclination of mothers to nurse their babies, and the clamor for supremacy in the sale of artificial foods. Babies nursed by mothers may or may not be as fat as those reared artificially but they are robust. Cow's milk furnishes many chances for infection. If the mother cannot wholly nourish the child, partial breast-feeding is of great value even if only once in twenty-four hours. Before giving up and adopting other means of feeding, stimulate the mother's secretion as much as possible, remembering that nutritious food is a better galactagogue than drugs. When cow's milk must be used, modification is *necessary* but clean milk is *imperative*. Attention to the getting of clean milk is much more valuable than copying various formulæ for modifying it.

Infant-Feeding: Accidents and Incidents.—Dr. W. P. Northrup of New York presented this paper. He said accidents may arise from the very exactness used in the feeding. The modifying of milk for the use of infants places a great responsibility upon the physician, and he must remember this when adopting his formulæ. A case of scurvy followed by rickets was detailed. This was due to the formula not being changed for months at a time. He thinks that many babies are given milk which is behind their age in its strength. His ambition is to gradually increase until full milk is used at eight to ten months of age. Fat, sugar, and proteids should be advanced together.

The discussion on infant-feeding was opened by Dr. Henry D. Chapin of New York. He stated that what was gained biologically was lost chemically in the sterilization of milk. In hospital use he has abandoned sterilizing, as the infants fed on such milk invariably get thinner. Percentage feeding has not solved the question and physicians have gone too far in its use. The most important question is that of getting the fats and proteids in a form which can be digested by the infant. The conclusion that the less manipulation given cow's milk the better is the result experienced. While laboratory feeding is an advance, its disadvantage is the excessive amount of manipulation involved. After being separated the fine emulsion can not again be obtained by mixing. The plan now used by Dr. Chapin is as follows: He insists on the milk being bottled at the farm and delivered to the family in the original bottle. If proper cleanliness is observed at the farm (and this should be looked after) the milk is started absolutely clean and is not manipulated. The milk is allowed to stand in quart bottles until the cream rises, nine-tenth of the butter fat coming to the top. The distinct line of the cream should be looked for to prove that no milk has been put in since the bottle was first filled. By means of a cylindrical ounce dipper on a long handle the contents of the bottle are then removed, beginning at the top. The first 9 ounces from the top of a quart bottle contains 12 per cent. butter fat, 4 per cent. proteids, and 4 per cent. sugar. The first 15 ounces contains 8 per cent. butter fat and the same percentage of proteids and sugar. Many samples have been assayed and give the above proportion with great uniformity. In this way but little manipulation of the milk is required and a percentage which is accurate enough is obtained. As the mother can do this, it is of great importance. Rules have been made too abstruse, a professor of physics and chemistry and a laboratory being necessary to carry them out. Hence, mothers get disgusted and buy artificial foods. After a trial of all diluents gruels are preferred. These are dextrinized in nearly all cases. Instead of saying, 'so much fat' should be given, watch the stools. Attention has been given to the wrong end of the baby.

Dr. Victor C. Vaughan agreed that the very fine modifications of milk are often unnecessary and even unjustifiable. Sterilization and Pasteurization alter milk to some extent. The chief proteid changed by a high temperature is nucleo-albumose. The point is not definite; at 158° F.

it is little changed but at 160° F. the change is quite marked. Diarrhea is often due to failure in sterilization. The colon bacillus is variable in virulence. Again, the bacillus is destroyed but its toxin is not, a temperature of 356° F. having no effect on the toxicity of some samples. Hence, no amount of sterilizing will render such milk fit for infant-feeding.

Dr. William L. Stowell stated that bad results were at times due to a failure to distinguish between the therapeutic effect and the nutritional value of modified milk. The former may be kept up and the latter lost sight of in practice. He prefers to use whole milk when the infant is six month of age. Attention was called to two points: (1) Infants can and will digest large quantities of casein; (2) many physicians do not modify milk rapidly enough to keep up with the age of the child.

Dr. A. Jacobi said that if any one had come to the session with the impression that he could learn positively how to feed children he must be disappointed, for different advices had been given by the speaker. He advised each physician to use his own brains, as it is wonderful how handy brains are in the practice of medicine. Most practitioners are diluting with cereals and this is the best method. Nine out of ten babies cannot digest pure milk. When milk is once separated it can never be made into milk again. Mother's milk is not exactly the same at all times yet infants thrive on it. Hence, there is some mistake in the statement that modified milk must have just such a percentage on such a day. Nature is more generous than are doctors' theories. A normal baby will pass out undigested material when fed on its mother's milk. Good has been done by boiling, sterilizing, etc., but we are overdoing our theories.

Dr. J. P. C. Griffith believes that sterilized milk is capable of producing scurvy, yet he believes in the process under certain circumstances. He has also seen four cases of scurvy due to a faulty use of laboratory milk, but he is a great believer in the use of laboratory milk. Judgment must be used.

Dr. Henry Koplik said that a distinction must be made between healthy children and those that are not quite well. Milk is easily contaminated and mothers should be taught to keep it clean. He believes it is, and always will be, a human impossibility to get cow's milk that is absolutely clean. For a diluent he does not use cereals in health but water. If the child be sick an effort should be made to use something that will agree with it.

Gastro-intestinal Hemorrhage in New-Born.—Dr. E. H. Small of Pittsburg reported a case of this condition. The delivery of the child was by forceps. When thirty-four hours old there was a discharge of blood from the mouth and rectum, and at intervals of a few hours three other discharges from the rectum occurred. The nature of the affection was discussed, the fact that more cases occur in institutions than in private practice pointing to an infection as the cause. There are probably changes in the blood or vessels or both. The differential points between this affection and hemophilia were indicated.

Stools in Diarrhea of Infants.—The following types were discussed, the green, brown or muddy, leaden, whitish-gray, mucous, and the dry pasty. In the treatment, hygiene is of vital importance. In addition to this, treatment falls under three heads: Elimination, disinfection and feeding.

Contagious Diseases.—This, the regular topic for the afternoon, was then taken up. "Shall Children be Kept from Measles and Exanthemata" was the subject of the paper of Dr. C. F. Wahrer of Fort Madison, Iowa. It is best to quarantine against some diseases, because their mortality is great and the tendency to acquire them diminishes with age. Such are scarlatina, diphtheria, variola, pertussis, etc. In the case of measles the disease is less severe in childhood and more severe after puberty. Epidemics among adults in camps, mines, etc., are productive of great harm. Hence, it is not always best to keep children from being exposed to the disease. It should be guarded against in hospitals, crowded tenements, etc. There is no good reason why healthy children above two years of age should not be exposed.

In the discussion Dr. Griffith did not agree with this view. In one large foreign hospital the deaths from measles were more than from either diphtheria or scarlet fever.

Dr. L. Fisher would not allow children to catch measles if he could prevent it. He finds serious complications, as otitis media and empyema, to be too common to warrant this. Laryngeal stenosis is a complication that is fatal in many cases; 20 of 25 cases he intubated ended in death.

Dr. J. F. Schamberg stated that the mortality from measles was greater than was generally supposed. In Philadelphia during the past year it was greater than the mortality from diphtheria or scarlet fever.

Roetheln.—Dr. Henry Koplik of New York City read this paper. He considered it from the standpoint of a distinct affection apart from measles and scarlatina, and its differentiation from these exanthemata. Rötheln has been doubted as an entity by some writers, but it can be proven to be such. It resembles measles and is often mistaken for that disease. The eruption appears on the face as a papular rash of deep rose color, as a rule discrete, with crescentic outline. It spreads rapidly over the body, its appearance on the buttocks and thighs being regarded of diagnostic importance. In from a few hours to a day it fades. A real desquamation has never been established by Dr. Koplik. Unlike measles, Rötheln is not a disease of the mucous membranes, and the cough, coryza, etc., of measles are never seen. The conjunctiva is injected as in grip, but there is no photophobia. Children do not generally complain of the tonsils, which are injected, but adults do. As to the

soft and hard palates, streaks and spots of eruption have been reported as occurring in these locations during the disease. He has also observed this in epidemics, but the point emphasized is that these spots are absolutely not characteristic of Rötheln and hence of no diagnostic importance. The red spots with bluish-white center characteristic of measles are absent so the buccal mucous membrane is of negative diagnostic value. There may not be any temperature-rise in Rötheln. If there be a rise it is generally at the outset of the disease; whether the eruption be out or not. The temperature may drop while the eruption is still present. A study of the lymph-nodes was made in 12 cases. The glands of the neck, axilla, and groin were distinctly enlarged. In rare cases of measles this also occurs, but so rarely as to make them of diagnostic importance in Rötheln. This enlargement of glands often persists after the eruption has disappeared and sometimes lasts for weeks. The spleen is not enlarged.

In discussing this paper Dr. Griffith said he had repeatedly seen desquamation in cases of Rötheln. He does not find the temperature-chart characteristic, although the glands are enlarged more than in measles; the cervical glands are often enlarged in the latter and are found if looked for.

Dr. Koplik said that he ruled out the cervical glands when making the diagnosis of Rötheln, referring only to those of the axilla and groin which are diagnostic. He has never seen severe complications with the disease. He isolates cases, letting the children run in the street as soon as the rash disappears in summer, but keeping them indoors for a week in the winter.

Scarlet Fever Rash.—Dr. Jay F. Schamberg of Philadelphia gave the results of clinical and pathologic study of this condition with especial reference to its origin and the character of its desquamation. The clinical appearance of the rash of scarlet fever was described as being made up of generalized erythema, punctated spots, "goose-flesh" papules, due to inflammation instead of contraction of the hair-muscles, and miliary vesicles. These vesicles are present in the vast majority, if not all, of the cases of scarlet fever, sometimes being so marked as to suggest some other disease. In some cases the vesicles are not seen with the naked eye, but are found in large numbers by the aid of the microscope. The vesicles appear more often in severe rashes and are more copious in cases of intense eruption. The intensity of desquamation is directly proportionate to the amount of vesiculation present. Too much stress has been placed on desquamation as a diagnostic point in diseases, the process only being the termination of some other stage. The persistence and character of the desquamation is of more importance than is its mere presence. Desquamation is the result of the vesicles pushing off the epidermis. The conclusions reached are: (1) The color of the rash varies in individual cases. Occasionally it is scarlet, but more often a dull red with an element of brown present. (2) The rash consists of punctæ, vesicles, and "goose-flesh" papules. (3) Vesicles are more common than ordinarily supposed. (4) Desquamation begins at the summit of the vesicles and enlarges.

In discussion Dr. Wahrer said that descriptions of rashes were very good, but it is hard to give an idea of them to others. Clinical experience is worth all descriptions and is the only way one could learn to differentiate.

Dr. Schomberg in answer to questions stated that he had examined the glands in 100 cases of scarlet fever and found enlargement to be constant. He has also noticed white spots on the gums in measles, but they occur as well in scarlet fever. He thinks they are really a desquamation of the epithelium which is whitened by inltration. They are not diagnostic of measles.

Fetal Ichthyosis.—Dr. Annie S. Daniel of New York gave a demonstration of a specimen of this condition with complete pathologic and bacteriologic examinations. The child was born of a healthy Sicilian peasant woman, labor occurring two weeks before it was anticipated. The woman had had four normal pregnancies and one abortion. The child weighed five pounds, cried constantly, could not suckle, and died when twenty-seven hours old. Pathologically the same lesions were present that have been reported by other observers. No cause for the condition could be found.

Fetal and Infantile Typhoid.—Dr. John Lovett Morse of Boston read this paper. It has been proven that the typhoid bacillus can pass through an abnormal, and possibly a normal, placenta, and thus infect the fetus. The lesions in fetal typhoid cases are general rather than local, as might be inferred from the nature of the infection. This being through the blood primarily it is of the nature of a septicemia from the beginning. This septicemia accounts for the large mortality of fetal typhoid. Infection of the fetus does not necessarily follow infection of the mother. The intestine of the fetus is not functionating, hence, the classical lesions of typhoid are not found in it. Regarding infantile typhoid there is no obvious reason why the disease is more rare during the second year, but such is the case. During the first year when the infant is nursed, chances of infection are less, but chances seem greater during the second year when milk is used in large amounts. However, the disease is either uncommon or is unrecognized. It is hard to differentiate between the lesions of enteritis and typhoid. Pathological studies and tests by serum reaction should be carried out in large series of cases to determine the frequency of typhoid in infants. The symptoms are essentially the same as in adults except that they are lighter. The mortality is greater.

In the discussion Dr. J. C. Wilson emphasized the necessity of using the modern methods of research to find the pathological lesions in certain clinical conditions. He finds the mortality

of enteric fever to be decidedly less in children, at least in cases where the symptom-complex justifies the diagnosis of enteric fever. Many cases can be decided only by the application of modern methods of investigation, especially the serum reaction. He recognizes three types of the disease, the fetal, the infantile, and the adult. One difficulty in recognizing the infantile type comes from the fact that this type occurs at times in adults, and the adult type is occasionally found in infants.

Dr. Griffith believes typhoid fever is much more prevalent in infants than is generally thought. The mistake is made in looking for the adult type when the infantile form is different in its symptoms. More cases in infants will be found since the serum reaction has come into use. Infantile typhoid cannot be called a rare disease now. He finds the mortality less than in adults.

Dr. Morse stated that in childhood the mortality was less than in adults, but that in infants under two years of age statistics and his own experience showed a higher mortality. Present data as to the frequency of the disease in infants are unreliable. Research needs to be made.

THIRD DAY—JUNE 7TH.

Diseases of the Blood and Circulation.—Dr. Leopold F. Haas of New York City reported two cases of diabetes mellitus in children. The patients were a girl of nine and her brother aged five years. Both had adenoids and enlarged tonsils. There was a family history of tuberculosis on both the paternal and maternal sides. The girl had peliosis rheumatica in addition to the diabetes. The boy had been run over by a bicycle before the disease appeared. A possible etiological relation between peliosis rheumatica and diabetes mellitus was suggested. The history of tuberculosis was also considered significant.

In the discussion Dr. Stein stated that the pathogenesis of the disease was not so obscure as supposed, it being an affection of the nervous system, especially of the brain. It has nothing to do with diabetes mellitus in older persons. Operative procedure is the best treatment, spinal puncture, trephining, etc.

Dr. Lautenbach stated that he hears adenoids mentioned in every Section. They seem to be indicative of some systemic condition. They might serve a useful purpose in diagnosis, etc., if we only knew what they meant.

Scorbutus.—Dr. Henry E. Tuley of Louisville, Ky., read a paper entitled "Purpura Hemorrhagica or Scorbutus: A Clinical Sketch." The case was clinically a typical one of scorbutus, but also had symptoms of purpura hemorrhagica. The child had been fed at the table and could hardly have had true scurvy. He thinks the term purpura hemorrhagica should not be used as the affection so-called is a modified form of scorbutus.

Dr. Griffith, in discussing the paper, said that purpura is just such a word as jaundice and the diseases in which it occurs shade into each other. Sometimes the rash is purpuric; again it is erythematous or urticarial.

Value of Blood-Examinations for Diagnostic Purposes.—This was the subject presented by Dr. J. Brandeis of New York. Diseases were divided into three classes, *viz.*: (1) Those in which blood-examination is essential to a diagnosis; (2) those in which it is an aid to diagnosis; (3) those in which it helps determine the prognosis.

In the discussion Dr. Morse stated that many diseases had been given which were not common to children and the same conclusions would not answer owing to the difference of blood-diseases in children. The different forms of corpuscles, especially the nucleated, do not have the serious significance in children that they do in adults. Leucocytosis also occurs much more easily in children. In cases of serous pleurisy in adults he has found no leucocytosis and thinks the sign is of no value.

Iodine Reaction.—Dr. Louis Fischer read for Dr. S. Weiss of Vienna a paper on the "Differential Diagnosis Between Abdominal Typhoid and Appendicitis, by Means of Iodine Reaction: Report of Case." The solution used is Ehrlich's iodine gum solution:

℞ Iodi sublim..... .....1.0
Kali jodati..... .....3.0
Aqua distill..... .....100.0
Gummi Arab. q. s. ad consistentiam syruposam.

A drop of blood is pressed between cover-glasses, to get as thin a film as possible, and allowed to dry in the air. A drop of the solution is then added to the slide and the specimen is ready for examination. The blood from a healthy person gives the following reaction: The red corpuscles stain a dark-yellowish color, the leucocytes being a lighter color and their nuclei appearing as lemon-colored, very glossy bodies. Normal blood also contains brown granules (extracellular glycogen). If suppuration be present in the body the blood gives a different reaction. The extracellular glycogen is considerably increased. The leucocytes assume a brownish hue of varying intensity, being a dark reddish-brown in some cases. This coloration may be general or in fine or coarse granules which are plainly distinguishable from the remaining yellow cell-bodies. The probability of a connection between this reaction and suppurative processes in the body is based upon the following facts: (1) The reaction disappears in a few days after the incision of an abscess; (2) the reaction begins at the same time as does the disintegration of infiltrated tissue, *i. e.*, the formation of an abscess. The reaction does not appear if inflamed infiltrate undergoes resorption instead of suppuration. The iodine reaction affects almost exclusively the polynuclear neutrophiles, never appearing in the eosinophile. Notes were given of a case simulating typhoid fever. The iodine reaction gave the pus

reaction. Operation revealed an appendical abscess, which was evacuated.

Hydrencephalocele.—Dr. Carl Beck of New York reported three cases of hydrencephalocele. In one the skiagraph showed the nasal bones separate from the frontal and pushed down. Two of the three are living after operation. The prognosis in hydrencephalocele is getting better under thorough asepsis.

Heart-Disease in Children.—Dr. Frederick A. Packard of Philadelphia read a paper upon "Antecedents of Valvular Heart-Disease in Children." The paper was based upon the analysis of the previous illnesses in 75 cases of endocarditis in childhood, with especial reference to the various infections. In 3 of the 75 cases no history of previous illness was obtainable. Of other diseases there was a history of rheumatism in 34 cases, chorea in 18, scarlet fever in 11, cerebrospinal fever in 2. His conclusions are that in many instances endocarditis must be attributed to such minor affections as coryza, skin affections, gastro-intestinal disturbances etc., instead of to the diseases more commonly supposed to be causes. A careful examination of the heart should be made after the occurrence of these diseases, as well as after the severer affections.

School Children.—The regular topic of the session, school children, was then taken up. Dr. E. Stuvey of Fort Collins, Col., presented a paper on "Symmetrical Development, or Does Our Present School System Develop the Highest Powers of the Child?" The physical, intellectual, and moral powers of the child should be developed at the same time. Teachers should have a more thorough training before beginning their work. They should understand the physiology of the brain and the development of the mind. There should be more enthusiasm in the work of teaching and less routine. Too many studies are given children at one time. More attention should be given to object-teaching, outdoor work in this line being of great value, mentally and physically. More time should be devoted to manual training. School sessions and recitations are generally too long and too many examinations are given. Whipping has been superseded by cruel and dangerous punishments.

School Break-Downs.—This was the subject presented by Dr. J. Henry Bartlett of Philadelphia. Reference was made to an article in a first-class monthly in which the writer claimed that 16,000 children in five large cities had been compelled to leave school in one term because of breaking down in health. The belief that this result, as claimed by the writer, is due to the present school system is unwarranted. Causes other than school-life which play a large part in ill-health, causing the child to leave school were considered. The principal ones are diet and haste in eating, lack of exercise, and the hours of sleep. These all occurring during the developmental period cause deterioration in the child's condition. Whatever the school strain may do, it has a host of allies. In some cases the school may be a safety-valve where the evil effects of some of the other influences may be set aside. A thorough study of the developmental processes needs to be made to get at the bottom of what the writer of the article in question calls a crime. The school system is good in many ways; too many examinations, etc., are simply an overdoing of a principle and are not essentially a condemnation of the principle itself.

Care of the Ear.—Dr. Louis J. Lautenbach of Philadelphia read a paper upon the "Care of the Ear in School Children." Statistics show that 7 per cent. of pupils have deficient hearing in both ears and from 13 to 25 per cent. in one ear. Young children are especially liable to ear-disease, because the Eustachian tube is open. An examination of the nose and throat is necessary when the ear is affected. A systematic examination of the hearing of all school children should be made. In this way the parents are helped and the physician gets to see the patient earlier and is more likely to be successful in treatment.

In the discussion on school children Dr. Wahrer said that the physician lacked the cooperation of the municipal authorities in dealing with this question. He has little sympathy with kindergartens in the way of getting children to work earlier. They are sent to school too early now and are taught too much in the beginning. He would abolish competitive examinations. Some children can do work easily and win prizes and first place without trouble. Others cannot and feel it a disgrace. Not every person can be a doctor, lawyer, or preacher. Educate children according to their capacity and ability to use knowledge. Every child should be examined by the family physician before it is sent to school.

Dr. E. E. Graham said that he doubted if developmental processes should be made the basis of the break-downs in school schildren. Developmental processes are natural and should not be blamed. Put the blame where it belongs—on the school. The system of fortnightly grading was condemned. The strain on medical students when examination comes but once yearly was cited and compared with these examinations of children every few weeks. The strain coming so often and on young children is productive of evil results.

Dr. Sutherland of Nebraska thinks the evils of our school system can be overcome, partially at least, by instituting two processes, *viz.:* (1) Make the qualifications of teachers greater. (2) Allow them more latitude in their function, by both the parents of their pupils and by the school board.

Dr. Allport of Chicago spoke regarding the system of examination of the eyes and ears of pupils which he has originated. This system is now working well in Chicago and is being adopted by other cities. He has never known a school board to refuse its adoption when it was intelligently presented. The tests are thoroughly unobjectionable to both pupil and parents. They are not obligatory. When a defect is discovered

the pupil need not go to any definite physician nor to any at all. The tests cost practically nothing, but $200 for Chicago with its 250,000 pupils. About 33 per cent. of children have defective eyes and 50 per cent. need treatment for eyes or ears.

Dr. Rosenthal stated that medical inspection in Philadelphia extended only to acute and contagious diseases. The family physician has great influence with parents and should not criticise medical inspectors, which has been done.

Dr. Lautenbach commended the German school system. He thinks good results will come from physicians working to have teachers given more power. He would not recommend having physical examinations under the control of school physicians, as they would be antagonized by the profession and by the public.

Liquid Air.—Dr. A. Campbell White of New York gave a demonstration of liquid air and spoke of the results of a year's use of this material in medicine at the Vanderbilt Clinic. A case for carrying the air was shown. In this it will last for several hours. It is now used as a spray and in a bulb as a cautery. It will not kill germs, but suspends their activity for a long time, they being brought back to normal only with great care. The question is whether this temporary suspension of vitality will not enable the body to completely destroy them. The effect of liquid air on human tissue is to cause a temporary local anemia followed by a great hyperemia If the cold has been sufficiently intense, a slough follows. Pain is not caused by its application, only a slight tingling being felt. Anesthesia lasts for some minutes. In an operation recently done for correcting a deformed hand a perfect result was obtained, primary union being secured. When the substance is applied over the spinal ends of nerves in neuralgia or herpes zoster, the pain is at once stopped. Small ulcers may result from this in old people of low vitality. Boils can be aborted by completely freezing and pricking in several places. It is the best form of treatment for carbuncle. Spray is introduced into the openings and then externally. A dry absorbent dressing is applied as very free bleeding follows. The good effect is thought to be due to the extreme hyperemia which follows. In the clinic it is used in place of the cautery almost exclusively. Liquid air greatly relieves the pain and odor of cancer and it is thought that early treatment may cure epithelioma. Experiments are now being made to determine the value of the vapor in the reduction of temperature. Results from the external uses mentioned have been very gratifying during the year it has been in use.

FOURTH DAY—JUNE 8TH.

Athrepsia Infantum.—Dr. Louis Fischer of New York read a paper upon "Athrepsia Infantum; Diagnosis and Treatment." Improper assimilation of food causes a lowering of the vitality of the child. The greatest number of cases occurs in bottle-fed children. Whenever a nursing child ceases to gain in weight, examination of the breast-milk should be made and cow's milk substituted, if necessary. The best form is not sterilized or Pasteurized milk, but good, clean raw milk. Aim at sterilizing cow and stable and utensils rather than the milk. Constipation is a great trouble in athrepsia and changing to cow's milk often stops this. The dried albumen of egg has given good satisfaction as an accessory food in these cases.

Intubation.—The Secretary read for Dr. Joseph Trumpp of Munich a paper upon "Intubation in Private Practice, and its Perfection." Statistics from 55 operators in Europe and America give 5470 intubations with a recovery rate of 35 per cent. before antitoxin was used and of 82 per cent. since its use. In Europe there is a decided opposition to the practice of intubation outside of hospitals. The writer argues for this, however. Previous practice should be made upon the cadaver or on animals. Explain to the parents the differences between the bloodless and bloody operations, meaning by the latter tracheotomy. As to the caliber of the tube, if there is no special indication for a smaller one, use that which will just pass. Rubber tubes are preferred instead of metal.

Injuries Due to Intubation.—Dr. Alexander Klein read for Dr. Janos Bokay of Budapest a paper upon this subject. Injuries are classified as follows: (1) Those which occur during intubation; (2) those caused by the presence of the tube; (3) those due to extubation. In 1200 cases only 4 resulted in formation of a false passage. Such cases are usually fatal. The sitting posture is advised for intubation.

In the discussion of these papers Dr. Welch of Philadelphia said that the safest place for intubated patients is the hospital. He prefers metal tubes, as they are not so liable to receive a deposit. He cited a case in which the tube was pushed down when removal was attempted. As the child was not suffering tracheotomy was not done and after a time the tube was coughed up. He is not so much in favor of antitoxin as are some physicians and thinks the statistics regarding it and intubation are not reliable and fair. All patients in the municipal hospitals receive antitoxin, but its results have not come up to his expectations. Their mortality in intubation cases is 58 per cent.

Dr. Rigg of Pittsburg finds that the best way to lessen the danger of intubation in private practice is to train a competent nurse in the use of the tube and to keep her in constant attendance upon the patient This makes the safety approach that of hospital cases. His results from intubation are not so satisfactory, as he finds that the membrane usually extends below the tube. The most important question in antitoxin treatment is that of its early use.

Dr. White of New York said that not so much reliance should be placed on statistics regarding

antitoxin, as epidemics might be mild or severe. Each physician can judge of its effect for himself by seeing cases in which it is not used and those in which it is employed. Cases are benefited by intubation even although the membrane extend below the tube, as the greatest difficulty in breathing comes from the upper part. The dyspnea from the membrane low down is more like that of pneumonia and not so urgent.

Dr. Fischer uses antitoxin as he would any drug of which he knows the effect. The first dose is 3000 units, repeated in twenty-four hours, if necessary. He advocates the use of rubber tubes and condemns the practice of forcible extraction by external pressure.

Dr. Rosenthal adheres to O'Dwyer's methods and tubes. In every case in which he used rubber tubes the child died. Italians always require two or three numbers higher than the scale would give. He advises large doses of strychnine in cases of prolonged intubation. In extubation do not try to find the tube. Pass the instrument along the finger and into the tube as if it could be seen and grasped exactly. This method will always succeed. Use no pressure, but withdraw instantly when the tube is entered. He always cuts off the silk and allows the child to lie as it pleases. Cases of croup in measles are very severe.

Dr. Welch said he had lately seen many cases of croup in measles and that they are very fatal. The question is whether it is diphtheritic. The Klebs-Loeffler bacillus is not always present. The croup is not necessarily due to the formation of an exudate, but in many cases seems to be caused by intense congestion of the mucous membrane.

Surgical Circumcision.—Dr. Ferd. C. Valentine of New York read this paper. Illustrations showing the technic were distributed. Anesthesia is generally needed. None but physicians should do the operation, as it is a surgical measure and surgical asepsis should be carried out. Religious liberty would not be interfered with by this rule and laws should be enacted to this effect. In answer to questions Dr. Valentine stated that fewer circumcised than uncircumcised men came for genito-urinary treatment. The question of advising the circumcision of every male child is a large one and he does not think it wise to advocate publicly this procedure. He would circumcise in every case when asked by parents to do so.

The following papers were read by title: "Treatment of Ear Complications in Measles, Diphtheria, and Scarlet Fever," by Dr. C. W. Hoopes of Philadelphia; "Rheumatism," by Dr. S. E. Woody of Louisville; "Chorea," by Dr. J. Clements of Kansas City, Mo.; "Medicinal and Surgical Treatment of So-Called Scrofula," by Dr. G. M. Blech of Chicago; "Essential Points of Difference in Treatment of Adolescent and Senile Heart," by Dr. John A. Robison of Chicago; "Abortive Treatment of Pneumonia," by Dr. H. Illoway of New York; "Eye-Strain," by Dr. T. H. Fenton of Philadelphia; "Neglect of Teeth in Children," by Dr. A. D. Rosenthal of New York; "Physician's Responsibility in Physical Education of School Children," by Dr. Grace E. Spiegle of Philadelphia; "Movable Kidney in Children," by Dr. I. A. Abt of Chicago; "Symptomatology of Appendicular Inflammation in Children," by Dr. T. H. Manley of New York; "Normal Salt Transfusion in New-Born for Hemorrhage from Cord," by Dr. J. S. Miller of Philadelphia; "Some Joint Diseases in Children: Their Diagnosis and Treatment," by Dr. E. A. Tracy of South Boston, Mass.; "Diseases of Antrum of Highmore in Young Children, with Report of Case," by Dr. Emil Mayer of New York.

The following officers were chosen for the ensuing year: Chairman, Dr. S. H. Kelly of Cleveland, O.; secretary, Dr. William E. Darnall of Atlantic City, N. J.

BOOKS RECEIVED.

The MEDICAL NEWS *acknowledges the receipt of the following new publications. Reviews of those possessing special interest for the readers of the* MEDICAL NEWS *will shortly appear.*

THE OPHTHALMIC PATIENT. A Manual of Therapeutics and Nursing in Eye Disease. By Dr. Percy Fridenberg. Demi 8vo., 320 pages. Illustrated. The Macmillan Company, London and New York.

INTERNATIONAL CLINICS. Edited by Dr. H. W. Cattell. Vol. I. Tenth Series, 1900. 8vo., 315 pages. Illustrated. J. B. Lippincott Company, Philadelphia.

THE ANNUAL OF ECLECTIC MEDICINE AND SURGERY. Volume VIII. Edited by Dr. John V. Stevens. 8vo., 822 pages. Illustrated. Cincinnati, Ohio.

THE CARE OF THE CHILD IN HEALTH. By Dr. Nathan Oppenheim. Demi 8vo., 308 pages. The Macmillan Company, London and New York.

THE TREATMENT OF FRACTURES. By Dr. C. L. Scudder, assisted by Dr. F. J. Cotton. 8vo., 433 pages. Illustrated. W. B. Saunders, Philadelphia. $4.50.

DISEASES OF THE INTESTINES. A Text-Book for Practitioners and Students of Medicine. By Dr. Max Einhorn. 8vo., 391 pages. Illustrated. William Wood & Company, New York.

THE CELL IN DEVELOPMENT AND HEREDITY. By Edmund B. Wilson, Ph.D. Second edition. Revised and enlarged. 8vo., 483 pages. Illustrated. The Macmillan Company, London and New York. $3.50.

TRANSACTIONS OF THE NEW YORK STATE MEDICAL ASSOCIATION. For the year 1899. Vol. XVI. Edited for the Association by M. C. O'Brien, M.D. 8vo., 887 pages. Published by the Association. New York.

A PRACTICAL TREATISE ON SEXUAL DISORDERS OF THE MALE AND FEMALE. By Dr. Robert W. Taylor. Second Edition. 8vo., 438 pages. Illustrated. Lea Brothers & Co., New York and Philadelphia.

TRAITÉ DE MÉDECINE ET DE THÉRAPEUTIQUE. Par MM. P. Brouardel et A. Gilbert. Tome septième. Maladies du nez, du larynx, de la trachée, des bronches et des poumons. Par. MM. Cartaz, Castex, Barbier, H. Barth, P. Claisse, Mosny, L. Landouzy, H. Triboulet, Grancher. Balzer, Méry et Le Noir. 8vo., 931 pages. Illustrated. J. B. Baillière et Fils, Paris.